The Economic Burden of Occupational Fatal Injuries to Civilian Workers in the United States Based on the Census of Fatal Occupational Injuries, 1992–2002

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Foreword

The national burden imposed by occupational injury and illness encompasses numerous areas of personal and public life: It deeply affects personal well-being, it affects relationships between workers, their families, and their communities, and it affects the institutions and governing bodies of this country. This burden includes a component that is vital to overall function and health at the national, local, and personal level—the economic component of loss. To more completely understand the burden imposed by injury and illness in the workplace, it is necessary to further develop measures of the economic component of loss. This document attempts to add an economic dimension to existing research efforts addressing the incidence and prevalence measures of loss associated with fatal occupational injury. This research effort is of long standing within the National Institute for Occupational Safety and Health (NIOSH) and has been previously reported in such documents as *The Cost of Fatal Injuries to Civilian Workers in the United States, 1992–2001*, which is based on surveillance conducted within NIOSH and which draws on counts and information from the vital statistic reporting systems across the Nation.

The current document builds on this research and incorporates new information and counts from current and revised methods regarding fatal occupational injury, which are described in greater detail within the text of this document. The findings are compelling: Over the period studied, 1992–2002, the costs from these premature deaths exceeded $53 billion, an amount greater than the reportable gross domestic product for some States. These findings inform national efforts to reduce this severe toll on our nation's workers, institutions, communities, and the nation itself. Researchers and concerned parties within the occupational and public health professions, academics, organizations focusing on workplace safety, labor unions, and the business community have all proven to be willing and avid users of this data and have used this research to continue their efforts, in concert with continuing NIOSH research efforts, to reduce the great toll that fatal occupational injuries impose on our workers, workplaces, and nation.

John Howard, Ph.D.
Director, National Institute
for Occupational Safety and Health

Acknowledgments

The authors wish to express their appreciation to the reviewers for their insightful and thoughtful comments. The document draws upon the expertise and knowledge of those with practical and advanced knowledge of a number of areas and disciplines—economics, occupational safety, and the consequences of traumatic injury. Unfortunately, it is not possible to thank all of those who have helped to advance the body of knowledge in the cost of occupational fatal injury. However, it is possible to individually acknowledge the contribution of the reviewers who have donated their time and knowledge to improve this document: Phaedra Corso, Janie Gittleman, Steve Newell, and Scott Richardson.

The contribution of numerous other parties should be recognized given their contribution to making this document an accurate, validated, and published reference work. Dave Hilling provided untiring support in developing the computer programs, Joyce Spiker assisted in text and data table formatting, Kimberly Clough Thomas for her skills in document design, and Suzanne Marsh for her careful attention to publication standards.

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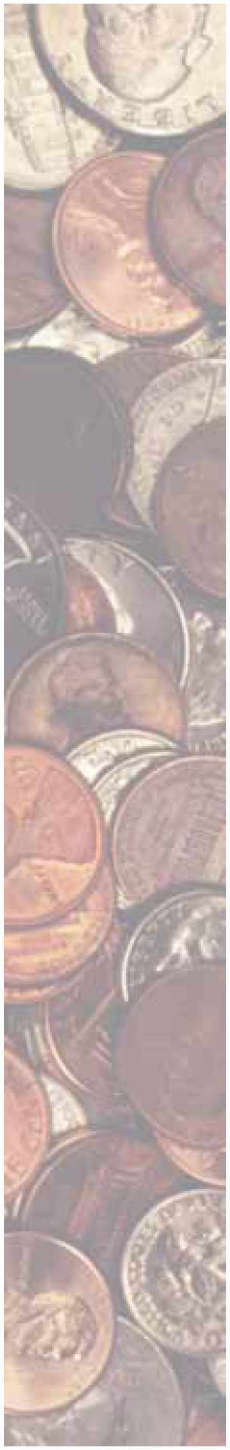
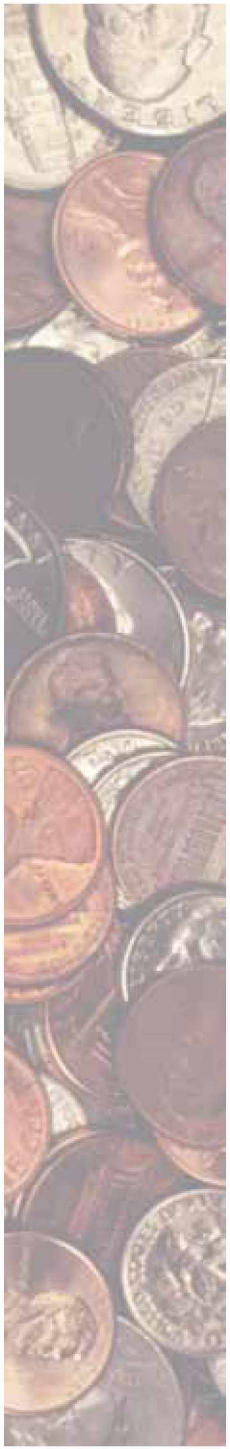
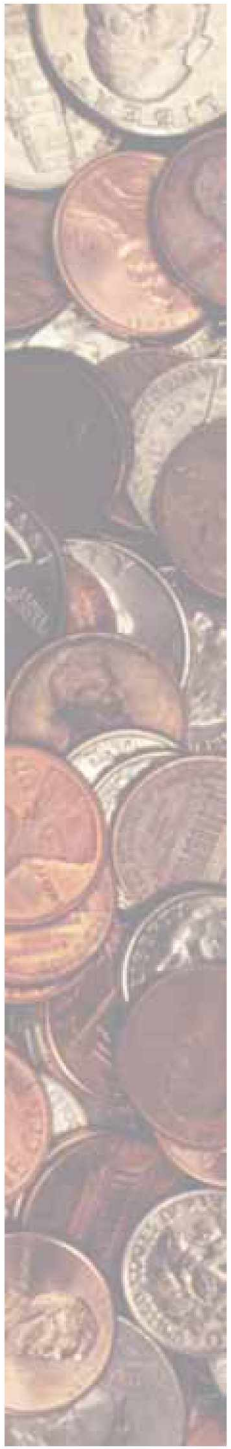


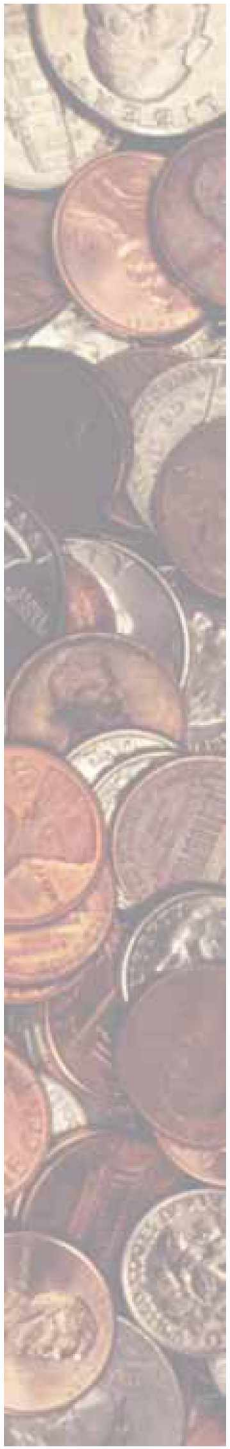




Appendices

Abbreviations

BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
BOC	Bureau of Census
CFOI	Census of Fatal Occupational Injuries
CPI	Consumer Price Index
CPS	Current Population Survey
DCI	Detailed Claims Information
DOL	Department of Labor
ECI	Employment Cost Index
GDP	Gross Domestic Product
NAICS	North American Industry Classification System
NHAP	National Human Activity Pattern (Survey)
NIOSH	National Institute for Occupational Safety and Health
NTOF	National Traumatic Occupational Fatalities
OES	Occupational Employment Statistics
OIICS	Occupational Injury and Illness Classification System
OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Administration
SIC	Standard Industrial Classification
SOC	Standard Occupational Classification (System)

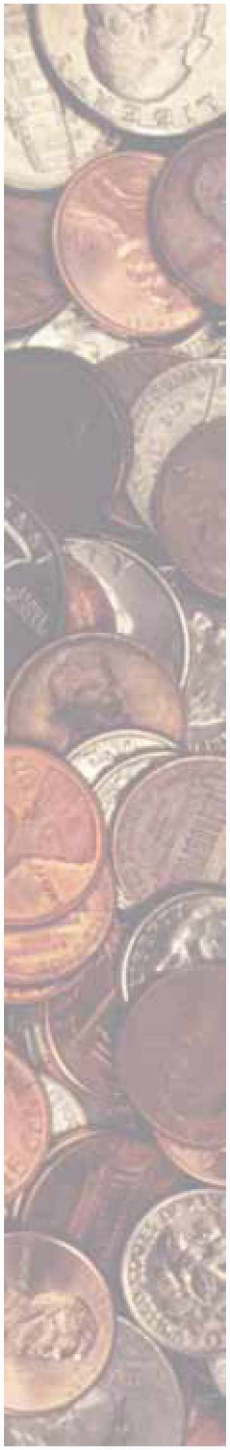


Executive Summary

Researchers within the National Institute for Occupational Safety and Health (NIOSH) have a longstanding commitment to determining the circumstances and costs of fatal occupational injury, reflecting the national commitment to understanding the severity and gravity of these incidents. Additional efforts have been undertaken to establish methods and recommendations to reduce the toll on our country's workers. This document continues this commitment to understanding and enumerating the dimensions of this nation's loss from fatal occupational injury. Despite the importance of fatal occupational illness, this document is limited to the economic burden of fatal occupational injuries.

Beginning in 1992, the Bureau of Labor Statistics (BLS) augmented their injury surveillance efforts with a national, systematic and comprehensive surveillance system to collect information on all fatal occupational injuries in the U.S. The joint State-Federal program, the Census of Fatal Occupational Injuries (CFOI), was designed to record, manage, and publish data from reporting systems in all 50 States and the District of Columbia on fatal occupational injuries. NIOSH researchers integrated data from the CFOI program into their continued research efforts, beginning with the initial reporting year, and have published a number of documents related to the NIOSH mission. In addition to reporting prevalence measures of fatal occupational injury, NIOSH researchers also developed measures to capture the economic costs from these incidents. These efforts reflected underlying concerns that the full measure of such loss must include the economic component of this loss. Such a measure not only captures an important additional component of the loss experience for the worker, employer, and encompassing social structure, but may also serves to direct limited resources toward the most effective prevention strategies.

The cost-of-illness method, which sums direct and indirect lifetime costs, was used to calculate the mean, median, and total societal costs for the fatal occupational injuries reported through the CFOI program. Indirect costs are calculated for each incident by accounting for median annual compensation at the time of death, the probability of survival, household production, wage growth rate adjustments, and the real discount rate. These costs are then added to the direct lifetime cost of medical expenses to arrive at the societal cost of fatal injury. The addition of the value of household production costs to this model represents advancement in methodology over previous models, which simply accounts for loss of income from wages and presents a point of departure from previous studies. In summary, the



current document provides detailed information on the extent of economic loss for premature occupational fatality for the years 1992 through 2002. These estimates are based on a well-known methodology in the field of direct and indirect cost estimation that was adapted by NIOSH [Rice 1965; Rice 1966; Miller et al.1995; Rice et al.1989; Leigh et al. 2000; Finkelstein et al. 2006]. The method is grounded in economic theory and has been reviewed by experts in the fields of economic costing and surveillance systems. Detailed information within this document includes the number of fatal occupational injuries and their total, mean, and median societal costs for each State and by worker and case characteristics.

Major findings from this study:

- Between 1992 and 2002, there were 64,333 civilian workers who died from injuries sustained while working in the U.S., generating a total societal cost of over $53 billion. The mean and median societal costs of a fatal occupational injury for these years were $831,000 and $838,000, respectively. (Table 1).

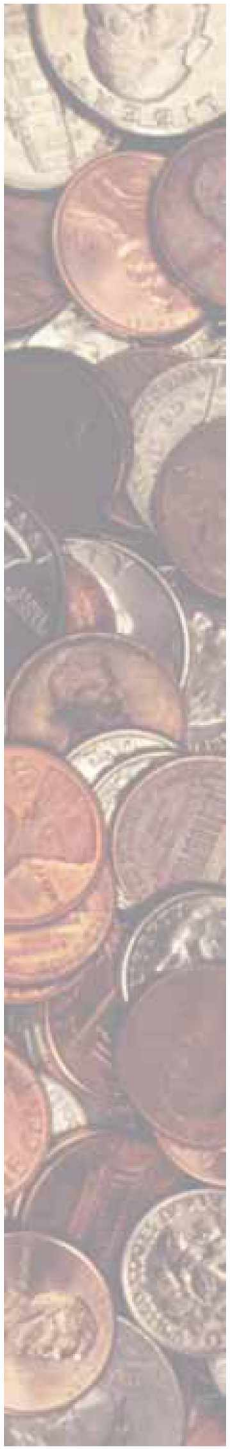
- Civilian occupational injury fatalities ranged from a high of 6,303 in 1994 to a low of 5,316 in 2002, while the total societal cost ranged from a low of just under $4.7 billion in 2002 to a high of $5.2 billion in 1994 (Table 1).

- By state, California experienced the largest amount of total societal costs ($5.4 billion), followed by Texas ($4.7 billion), Florida ($3.2 billion), Pennsylvania ($2.2 billion) and Illinois ($2.1 billion). Georgia reported a cost in excess of $2.0 billion and is the only remaining state above $2.0 billion. Vermont ($95 million) reported the smallest amount of societal costs and was the only state to report costs below $100 million (Table 2).

- Six states—Alaska, New Hampshire, Arizona, New Mexico, Louisiana, and Utah—had mean societal costs in excess of $900,000. Iowa and North Dakota had mean societal costs below $700,000 (Table 2).

- The majority (92%) of the occupational injury fatalities involved males, with total societal costs of $49 billion, while females reported costs of $4 billion. The mean societal cost for a fatal injury was slightly higher for females than males—$840,000 for females, $830,000 for males (Table 5).

- The age group with the largest share of occupational fatalities (25%) and the largest share of the total societal cost of occupational injury fatalities (32%) was the 35–44-year-old age group, closely



followed by the 25–34-year-old age group (21%, 27%) and the 45–54 (21%, 22%) year-old age group. Total societal costs for both the 35–44-year-old age group and the 25–34-year-old age group were disproportionately high, while costs for other age groups were generally in proportion to the number of fatalities, with the exception of the two age groups 55 and older, which showed relatively low costs (Table 5).

- By year, total societal costs showed a declining trend beginning in the year 1997 for Whites, while no comparable cost trend was found for Blacks and Others (Table 6).

- Between 1992 and 2002, the leading total societal costs by event or exposure were for Transportation Accidents ($23 billion), then Assaults and Violent Acts ($9.4 billion), followed by Contact with Objects and Equipment ($7.9 billion). Transportation Accidents were responsible for over 12 times the total societal costs associated with the event Fires and Explosion ($1.8 billion) (Table 10).

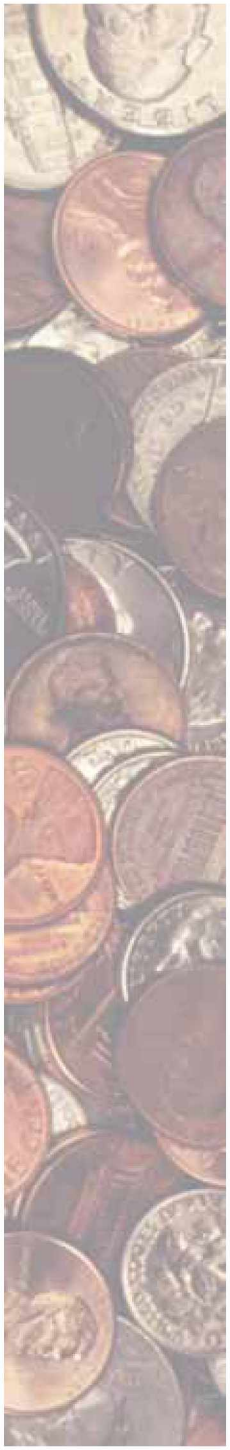
- The greatest total societal cost for Transportation Accidents by year occurred in the year 2000 ($2.2 billion). The smallest total societal costs for that same event occurred in the year 1992 ($2.0 billion). An additional fact of note is that, with a single exception, the mean societal costs for each of the event categories were highest in the years 2000, 2001, and 2002. (Table 11).

- Total societal costs by source of injury showed the highest costs for Vehicles ($24 billion). Highest mean ($940,000) and median ($931,000) societal costs were for Chemicals and Chemical Products (Table 15).

- By industry division, Construction was responsible for the greatest amount of total societal costs ($10 billion). However, the average societal costs in this division were only the sixth highest, much less than for Public Administration, which had the highest mean ($1.1 million) and median ($1.2 million) societal costs per fatality (Table 20).

- Transportation Accidents were responsible for the greatest amount of total societal costs in the Transportation, Communication and Public Utilities industry division, followed by Services and Construction. (Table 25).

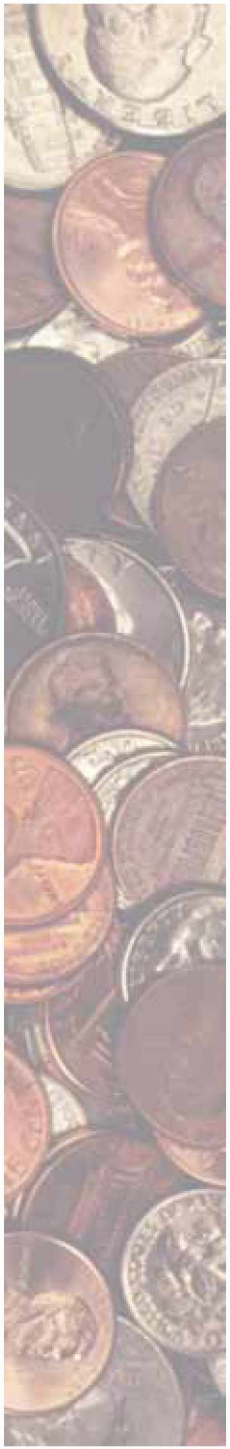
- By occupation division, Operators, Fabricators and Laborers had the highest total societal costs ($17 billion). However, their average societal costs ($784,000 mean, $825,000 median) were about a third less than the highest category, Managers and Professional Specialties ($1.1 million mean, $1.2 million median) (Table 29).



- Total societal costs of Assaults and Violent Acts were highest for Technical, Sales and Administrative Support occupation division ($2.7 billion) and lowest for Farming, Forestry and Fishing division ($311 million) (Table 34).

- By event or exposure and occupational division, highest total societal costs were recorded for Transportation Accidents for each occupational division, with two exceptions—Service and Precision Production, Craft, and Repair occupation divisions. Transportation Accidents were responsible for the second highest total societal costs within Services while Assaults and Violent Acts were the leading source of total societal costs. Transportation Accidents ranked fourth for total societal costs within the Precision Production, Craft, and Repair occupation division. (Table 34).

- By industry and occupation division, the highest total societal costs were for Operators, Fabricators, and Laborers within the Transportation, Communication, and Public Utilities industry division. The highest mean and median societal costs were found in Technical, Sales, and Administrative Support occupation division within the Agriculture, Forestry, and Fishing industry division ($1.4 million and $1.6 million, respectively). (Table 38, 39).



The Economic Burden of Occupational Fatal Injuries to Civilian Workers in the United States Based on the Census of Fatal Occupational Injuries, 1992–2002

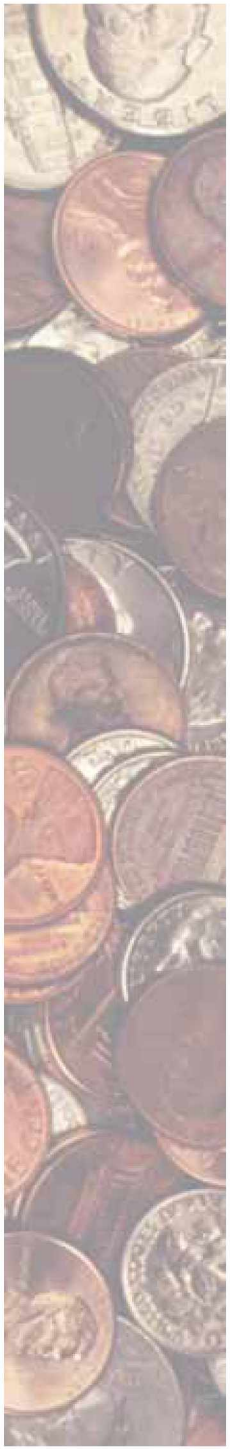
Introduction

Surveillance data is vitally important for understanding the occupational safety and health experience of workers. These data allow analysis of demographic, employment, and injury characteristics and also enable the examination of trends over time. They also allow for the description of the nature and magnitude of the occupational injury problem in the U.S., the identification of potential risk factors, the generation of hypotheses for further research, and the setting of research and prevention priorities. The standard for fatal occupational injury counts in the United States is widely considered to be the Census of Fatal Occupational Injuries (CFOI), a comprehensive record of fatal injury counts and characteristics within the U.S., maintained by the Bureau of Labor Statistics.

Surveillance data, although vitally important, are not singular measures of the impact of occupational fatalities on the U.S. Economic loss, or cost, provides a separate and complementary perspective that can provide insight into both the financial and economic dimension of loss and can also assist in directing limited research and prevention resources. Of course, additional dimensions—the human dimension (such as pain and suffering) of the experience of loss, for example—are not captured by either surveillance data or economic data, and the full dimensionality of this loss remains elusive and difficult to quantify. This document attempts to add one additional, significant dimension—the economic dimension—to our understanding of loss from fatal occupational injury.

Researchers, policy planners, occupational safety specialists and interested parties should be aware that this document, *The Economic Burden of Occupational Fatal Injuries to Civilian Workers in the United States Based on the Census of Fatal Occupational Injuries, 1992–2002*, serves as a supplemental update to earlier documents, which described the magnitude and circumstances of fatal occupational injuries. *The Cost of Fatal Injuries to Civilian Workers in the United States, 1992–2001* provides the number and societal costs of occupational fatal injuries by external cause of death, demographic characteristics, and state of injury as reported through the NIOSH National Traumatic Occupational Fatalities (NTOF) surveillance system.

Cost estimates derived using the NTOF



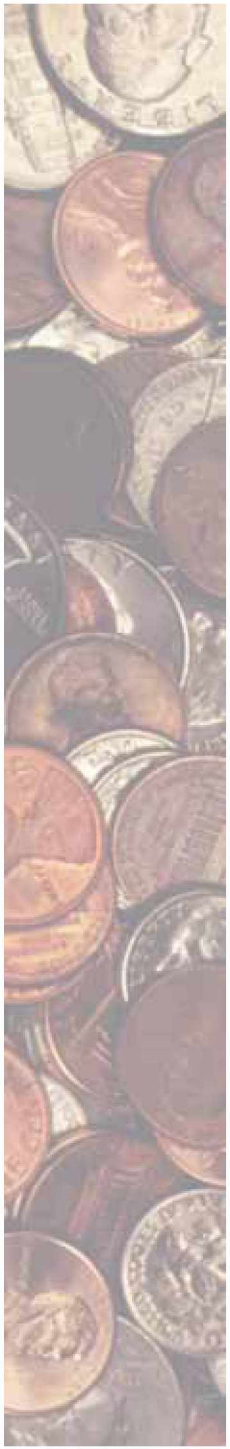
surveillance system and presented in *The Cost of Fatal Injuries to Civilian Workers in the United States, 1992–2001* vary from those presented in this document for a number of reasons. The estimates provided in this document are based on the CFOI program counts of decedents. Not only is there an additional year of data, 2002, in the estimates presented here, but each system has a different count of fatalities for each year of coverage. The occupations that determine the compensation values for the estimation process differ between systems. NTOF captured the "usual or lifetime" occupation of the decedent, while CFOI captures the occupation at the time of death. Cost estimates in the earlier document are expressed in 2001 dollars, while the cost estimates in this document are expressed in 2003 dollars. Finally, cost estimates based on CFOI fatalities replaced the Consumer Price Index (CPI) with the Implicit Price Deflator for Gross Domestic Product (GDP)to adjust compensation values for inflation. This replacement was made because indirect costs of an occupational fatality is a measure of the goods and services not produced by the decedent and the GDP Deflator measures changes in all prices of goods and services produced in the nation, while the CPI is limited to a fixed market basket of goods.

Methods

Fatal Occupational Injury Counts

CFOI produces comprehensive, accurate, and timely counts of fatal occupational injuries. CFOI is a Federal-State cooperative program that has been implemented in all 50 States and the District of Columbia since 1992 [BLS 2008]. Approximately 30 data elements are collected, coded, and tabulated, including information about the worker, the fatal incident, and the machinery or equipment involved. To compile counts that are as complete as possible, the Census uses multiple sources to identify, verify, and profile fatal worker injuries. Information about each workplace fatality—occupation and other worker characteristics, equipment involved, and circumstances of the event—is obtained by combining the source records, such as death certificates, workers' compensation reports, and Federal and State agency administrative reports. To ensure that fatalities are work-related, cases are substantiated with two or more independent source documents or a source document and a follow-up questionnaire. Source documents are matched so that each fatality is counted only once.

CFOI includes data for all fatal occupational injuries, whether the decedent was working in a job covered by the Occupational Safety and Health Administration (OSHA), other Federal or State agencies, or was outside the scope of regulatory coverage. For a fatality to be included in the Census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the

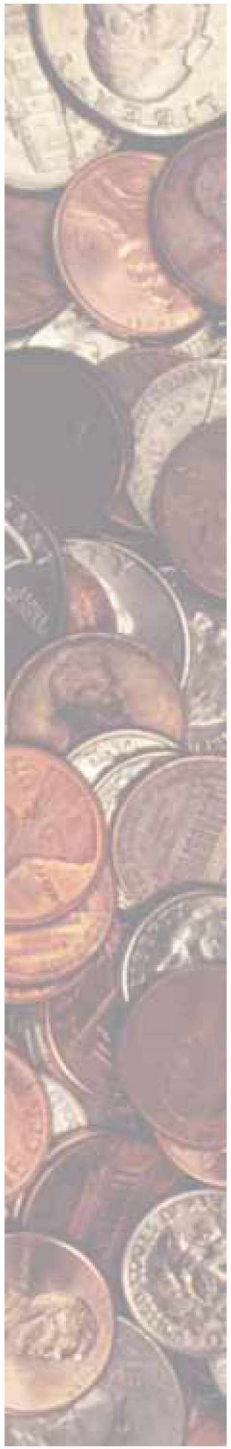


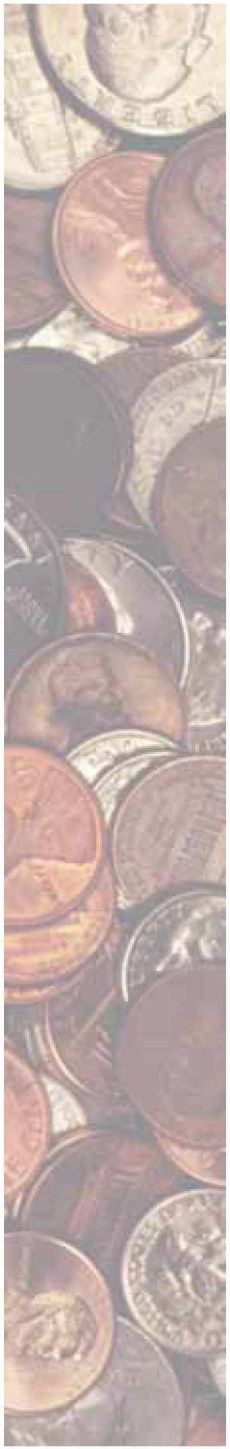
incident as a requirement of his or her job. Fatalities to volunteer, unpaid family workers or undocumented workers who perform the same duties and functions as paid workers are also included in the counts. Fatalities occurring among several other groups of workers are generally not covered by any Federal or State agencies, but are included in CFOI counts. These groups include self-employed and unpaid family workers, laborers on small farms, and State and local government employees in States without OSHA-approved safety programs.

Data presented in CFOI include only those deaths that resulted from occupational injuries. Occupational illnesses or diseases, such as pneumoconiosis, silicosis, cancer, or eczema to name a few, are not in the scope of this program. For this program, an injury is defined as any wound or damage to the body resulting from acute exposure to energy, such as heat, electricity, or impact from a crash or fall, or from the absence of such essentials as heat or oxygen, caused by a specific event or incident within a single workday or shift. Included are open wounds, intracranial and internal injuries, heatstroke, hypothermia, asphyxiation, acute poisonings resulting from short-term exposures limited to the worker's shift, suicides and homicides, and work injuries listed as underlying or contributory causes of death.

Data for the program are compiled from various Federal, State, and local administrative sources including death certificates, workers' compensation reports and claims, reports to various regulatory agencies, medical examiner reports, and police reports as well as news and other nongovernmental reports. Diverse sources are used because studies have shown that no single source captures all job-related fatalities [Karlson and Baker 1978; Baker et al. 1982; Stout and Bell 1991; Kane and Derstine 1993; Toscano and Windau 1995; Drudi 1997; Biddle and Marsh 2002; Layne 2004]. CFOI draws information on fatal occupational injuries from as many as 25 different source documents from such diverse sources as State farm bureaus, local police departments, emergency medical services, and the National Association of Chiefs of Police. In addition, other Federal agencies having jurisdiction over or compiling data about fatalities affecting specific groups of workers provide data to BLS. These agencies include the Occupational Safety and Health Administration, the Employment Standards Administration, the Mine Safety and Health Administration, the Department of Defense, the U.S. Coast Guard, the Department of Justice, and the National Transportation Safety Board.

The CFOI database contains variables useful for describing the characteristics of victims as well as injury circumstances. Data elements include coded worker characteristics such as sex, race, occupation, and age in addition to injury circumstances such as event or exposure and source of injury. The event or exposure and source of injury narratives





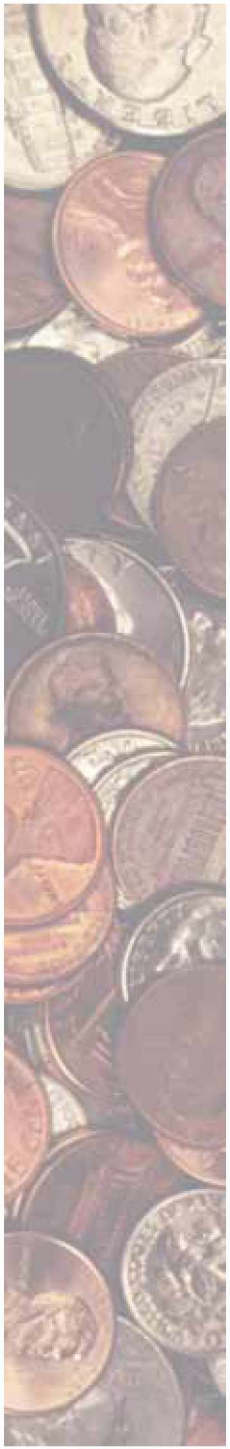
were assigned codes according to the Occupational Injury and Illness Classification System (OIICS) developed by BLS [2009d] in 1992 (see Appendix I).

During the years included in this document, codes for the occupation and industry at the time of death were assigned according to the 1990 Bureau of the Census classification scheme [BOC 1992] and the 1987 Standard Industrial Classification (SIC) system [OMB 1987], respectively. Source documents for which no occupation or industry entry was present or for which the entry was too vague were coded into the "not classified" category. Appendix II presents the 1990 Bureau of the Census classification scheme used to classify the decedent's occupation at the time of death. Appendix III presents codes included in the tables that provide information for detailed industry and occupation groupings. Appendix IV provides explanations of the abbreviations used in the tables for occupation and industry divisions. It should be noted that CFOI adopted the use of the North American Industrial Classification System (NAICS) and the Standard Occupational Classification (SOC) coding systems beginning in 2003. As a result, estimates for future years may not be comparable.

Economic Burden of Fatal Occupational Injuries

Costs of fatal occupational injuries were estimated using a well-established Cost of Injury model subsequently modified and further developed by the Division of Safety Research within the National Institute for Occupational Safety and Health. More extensive information on the methods and derivation of the model is provided in Biddle [2004]. The earlier publication, *The Cost of Fatal Injuries to Civilian Workers in the United States, 1992–2001*, [NIOSH 2009] provides a similar if not identical description of the methods used to calculate the costs presented in this document. Estimated costs are derived for what would have been the working "lifetime" of the decedent if they had survived. These estimates are presented by year of death; state of injury; sex, race, age, and occupation of the worker; event or exposure; source of injury; and industry groups in which the worker was employed are presented in Tables 1-57.

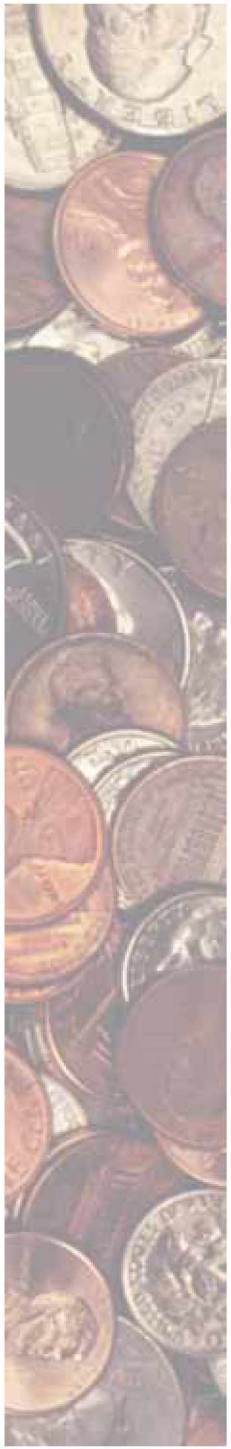
The cost-of-illness method, a common economic method, which combines direct and indirect costs of health outcomes, was employed to derive the societal cost of fatal occupational injuries. It calculates incidence-based costs, the lifetime cost of all fatal occupational injuries occurring in a given year regardless of what year the costs are accrued, rather than prevalence-based costs. Additional methods that determine the value of a statistical life—most notably willingness-to-pay and willingness-to-accept—are commonly used to calculate costs of fatal occupational injuries and generally provide much higher cost estimates for fatal injuries. For the methods employed here, base information for each decedent was obtained through CFOI. Because of a lack of appropriate wage or earnings data,



decedents who were identified as members of the U.S. military as well as decedents less than 16 years of age were not included in the cost calculations. Worker and case characteristics used in the cost calculations included age, sex, occupation, and race of the worker; employer industry; and year of death. Age is a necessary variable for the calculations in this model, and, as a result, those few cases where the age of the decedent was not known were excluded from the calculations. Although not necessary for the calculations, event or exposure, source of injury, and State of injury were obtained from CFOI to present societal costs for these groups. The direct and indirect costs of each occupational fatal injury reported by CFOI were calculated independently. Costs for all individual fatal occupational injuries were then summed for each characteristic or group of characteristics of interest.

The only direct cost was the single nominal value for medical costs in 1998 dollars of $11,276, which was obtained from the Detailed Claims Information (DCI) database from the National Council on Compensation Insurance [NCCI 1995]. This database provides estimates of the costs of injuries and fatalities to workers based on a nationally representative sample. The administrative data collected from State worker's compensation claims contain information on injuries with lost workdays. The administrative costs associated with workers' compensation were not accounted for in the present calculations. Because each State varies in the requirements for worker's compensation payment, the number of days lost prior to inclusion in this database ranges from two to seven days. However, this limitation does not affect the reporting on information for work-related fatalities. For this study, the mean of medical costs for fatalities over a four-year period from the DCI was used as the measure of the direct costs. The dollar value was adjusted to 2003 dollars using the CPI-Medical Care Index shown in Appendix V [BLS 2009a].

The indirect costs of an individual occupational fatal injury was derived by calculating the present value of lost household production and future earnings of that worker summed from the year of death until that decedent would have reached age 67, accounting for the probability of survival were it not for the premature death—the human capital approach. These calculations build on a similar model developed by Dorothy Rice in 1965 [Rice 1965]. However, because this model calculates the cost of individual known fatalities, several modifications were made to the Rice model. First, because the decedents were known to be employed at the time of death, the calculation for participation rate in the labor force was eliminated. The assumption was made that if the individuals would have survived, they would have remained in the workforce until the age of retirement. Second, the iterations were ceased when the decedent would have reached 67 rather than the age used in the Rice model, which was age 99. The age used in this model was selected based on the retirement age of a



substantial proportion of the current workforce. However, because it is unknown if the victim would have worked any additional years had they survived, for those decedents 67 or older at the time of death, only a single year of indirect cost was included in the cost calculation.

The indirect cost calculations are expressed as follows:

$$PVF = \sum_{n=y}^{67} P_{y,q,s}(n)\,[Y_{s,j}(n) + Y_s^h(n)] * (1+g)^{n-y}/(1+r)^{n-y}$$

where:

PVF = present discounted value of loss per person due to an individual occupational fatal injury

$P_{y,q,s}(n)$ = probability that a person of age y, race q, and sex s will survive to age n

q = race of the individual

s = sex of the individual

n = age if the individual had survived

$Y_{s,j}(n)$ = median annual compensation of an employed person of sex s, specific occupation j, and age n (includes benefits by detailed industry and wage growth adjustments)

j = specific occupation of individual at death

$Y_s^h(n)$ = mean annual imputed value of household production (h) of a person of sex s and age n

h = value of household production

g = earnings growth rate attributable to overall productivity as demonstrated by the Employment Cost Index (ECI)

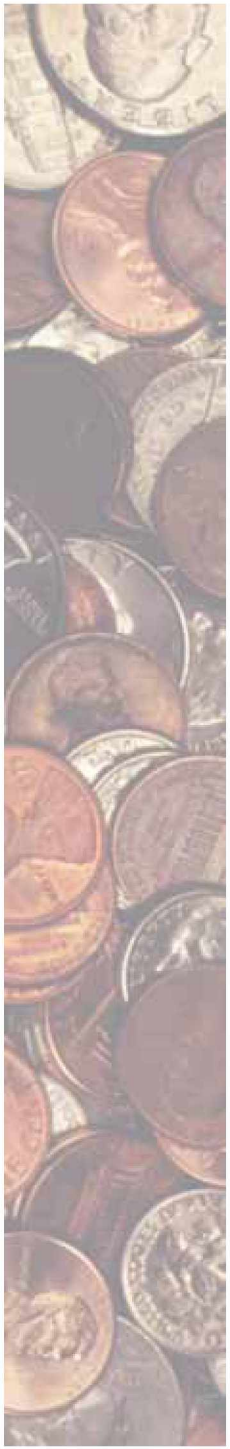
y = age of the individual at death

r = real discount rate (3%)

Indirect losses were adjusted by the probability that the individual would have survived were it not for the premature death that resulted from an occupational event or exposure, $P_{y\,q\,s}(n)$. The probability estimates used in this study were developed by the National Center for Health Statistics, Division of Vital Statistics. This agency used data from the 1990 Census of Populations as well as data on deaths occurring in the United States to U.S. residents for 3 years, 1989–91 [DHHS 1997]. These current life tables were based on a complete count of resident deaths in the United States during those years. Separate probabilities were calculated for each sex within the white population, the population other than white, and the black population. The initial survival table presented the number of persons in the sample surviving to exact age x. The proportion of persons who, having attained age x, will survive to age x + t, where t = time, was calculated by dividing x+t by x. The probability of survival by sex and race used in these cost estimate calculations can be found in Appendix VI.

The second major component in the indirect cost calculation is compensation or $Y_{s,j}(n)$. There are four elements of this component used in this model: base earnings, employee benefits, economy-wide productivity growth, and life-cycle wage growth.

CFOI provides information on the occupation of the decedent, but not the wage or salary at the time of death. Therefore, the base earnings for this model are an estimate of the earnings of the decedent established by the



decedent's occupation and sex at the time of death. Also, because of the lack of detailed employment information, the model assumes that the decedent had worked full-time in that occupation and would not have changed occupations nor left the job between the time of death and retirement age.

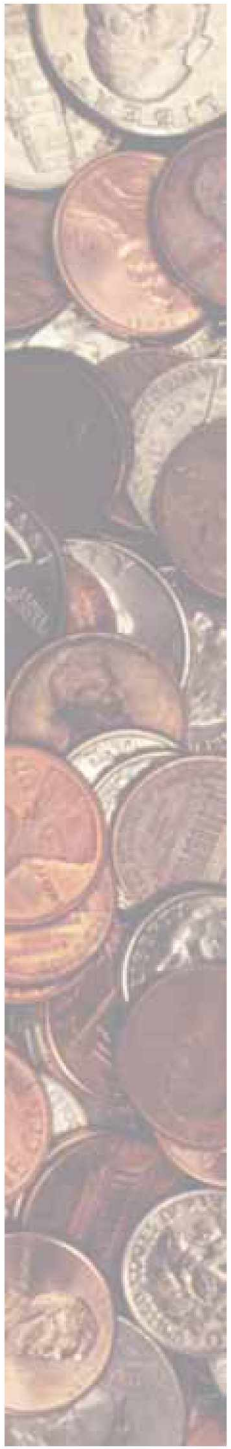
The base earnings assigned to each fatality were derived from the Current Population Survey (CPS) collected by the Bureau of the Census (BOC) for the BLS. This population-based survey includes wage and salaried workers, the self-employed, and all agricultural workers. Earnings from this survey were selected because earnings were estimated using the BOC classification scheme, which is the same system used by CFOI to code occupation (see Appendix II). Under the recommendation of BLS staff and without a valid statistical reason to select mean earnings, median earnings were selected for this model. For this model, base earnings were defined as median annual earnings before taxes and other deductions, enumerated by the 3-digit 1990 BOC occupation code, sex and specific age. Base earnings were not available by race; therefore the model assumes the same median annual earnings given sex and occupation for each race. Where data were not available for a specific detailed occupation, earnings from the next hierarchical level were substituted. These data were adjusted for inflation using the Implicit Price Deflators for Gross Domestic Product, which can be found in Appendix IX [BEA 2009].

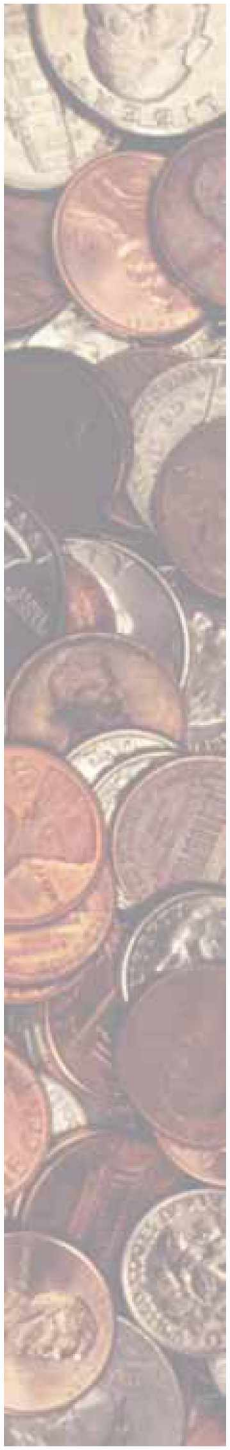
The estimates of median earnings from the CPS using the BOC classification scheme were derived for age groups by sex, but not for each age. However, for these estimates, median earnings for individual ages by sex were preferred because CFOI presented individual ages for each fatality. To derive median earnings for each age, the median age of each age group was determined and 6-month age intervals were created. This established 20 "ages" for each age group. The CPS-published median earnings for a particular age group was assigned to the median age of that age group. To derive an earnings value for each of the 20 "ages," the difference between sequential age groups was calculated as follows:

Earnings(x+1) – Earnings(x)
where: Earnings = CPS published age group earnings

This difference was evenly distributed within the age group and then the proportion of the median age earnings for each age was determined. The process was repeated for both males and females and for each year of earnings data. Finally, the base earnings assigned to each fatality were derived by adjusting the median earnings for the occupation of the decedent by the proportion associated with the age, sex, and year of death for that decedent. The adjustments to earnings by age and sex are found in Appendix VII.

To more closely represent the market value of an employee's compensation, the value



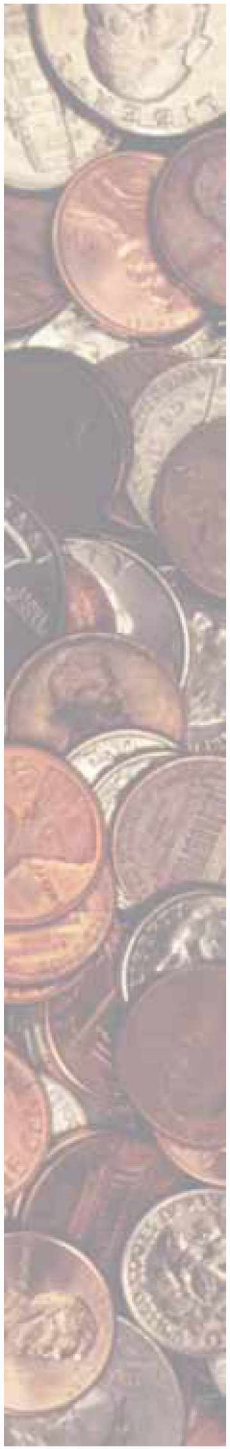


of employee benefits was added to the base earnings. These data were taken from the U.S. Chamber of Commerce annual survey of employee benefits administered to a sample of employers based on the distribution of U.S. employment [U.S. COC 2003]. The sample includes both public- and private-sector employers selected to represent a cross-section of U.S. business by industry, size of firm and geographical region. Mean estimates of benefits were calculated using data from hourly paid and salaried employees. Benefits as a percent of payroll for this study are presented in Appendix VIII. These benefits include the employer's share of legally required payments; retirement and savings plan payments; life insurance and death benefits payments; medical and medically-related benefit payments; and miscellaneous benefit payments such as employee education expenditures, child care, and discounts on goods and services purchased from the company by an employee. To avoid double counting, categories, such as paid rest periods, lunch periods, wash-up time, travel time, clothes changing time, and get-ready time, and payments for time not worked such as paid vacations, holidays, sick leave, or State or National Guard duty, are excluded. The benefit dollar amounts were adjusted for inflation using the GDP deflator, which can be found in Appendix IX.

The Employment Cost Index (ECI) was used to estimate the economy-wide productivity growth element ("g" in the equation on page 10)—how much earnings would rise in concert with the growth of the U.S. economy as a whole [BLS 2009c]. The ECI measures the change in the cost of labor and includes both changes in wages and salaries as well as employee benefits costs.

This index is based on establishment surveys of compensation costs that cover all occupations within the private and public sector. The surveys of approximately 5,000 establishments exclude farms, households, the self-employed, and the Federal Government. The 1987 Standard Industrial Classification (SIC) system was used to classify establishments by industry in the most current surveys [OMB 1987]. After the sample is drawn, weighted probability sampling methods are used, with weighting in proportion to establishment size, to select occupations in each of the sampled establishments; that is, a fixed number of occupations are selected in each establishment using a process that gives occupations with greater employment a greater chance of selection.

The ECI uses the current-cost approach, in which annual costs are calculated based on the current price of benefits and current plan provisions. The annual cost is divided by the annual hours worked to derive the cost per hour worked for each benefit. Values for earnings and benefits are calculated separately by BLS and for this model. Because the model forecasts the decedent's wages for up to 50 years into the future, it uses a long-term productivity growth rate, the average of the percent changes in the ECI from 1976 to

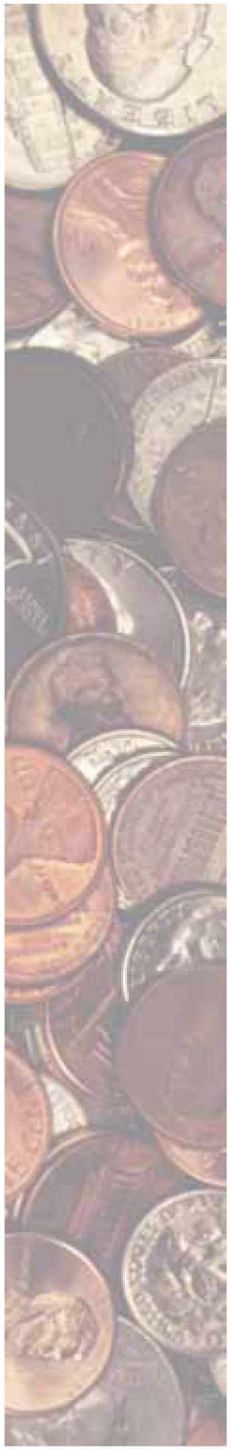


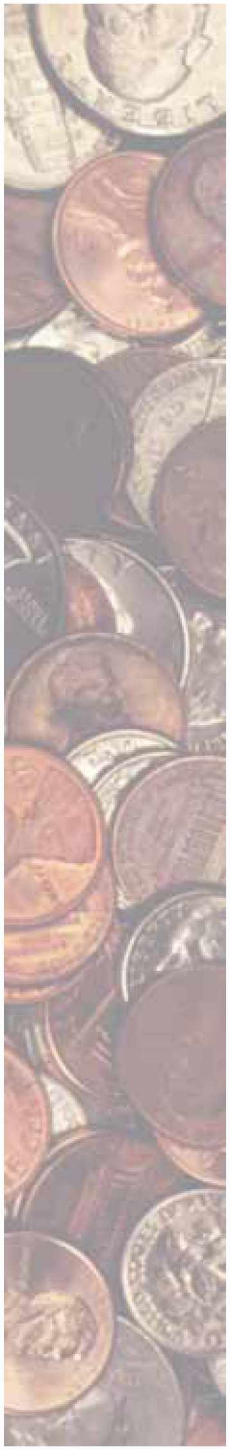
2005, to account for fluctuations in economic conditions over time. Deaths were assumed to be uniformly distributed by month and as a result, the wage growth rate was reduced by one-half in the first year. This is an inflation-free change in wages and represents an annual proxy for a change in productivity. The value of benefits was also adjusted using the same methodology.

To account for the final component of wage growth, estimates of the life-cycle growth, or the salary growth due to experience of the individual worker, were employed. The growth rate was calculated using wages from the historical income tables of the Current Population Survey (CPS) for the years 1980 through 1998 [BLS 2009b]. Wage by age is the single necessary component for deriving career growth estimates and was available in mean, not median, values. The CPS presented mean wages in constant dollars by sex, race, and age group for each year. The rate of change for mean wages was determined for each sex and race within a specific age group. Wages for the initial age group (x) were subtracted from the wages of the next age group (x+1) and divided by the initial age-group wage: [(x+1)-x]/x. This process was repeated for male and female decedents within each race category. For this study, it was assumed that the salary growth rate was constant within age groups–equal increments for each year of age within that age group. Specific career growth adjustment factors by age, sex, and race are presented in Appendix X.

The value of household production losses associated with a decedent of sex s and age n, or $Y_s^h(n)$, were derived from time-diary data captured in The National Human Activity Pattern Survey (NHAPS) study commissioned by the Environment Protection Administration (EPA) [Expectancy Data 2000]. A two-stage Mitofsky-Waksberg random digit telephone dial sample design was used in the survey that covered the period from September 17, 1992 to October 1, 1994. Quarterly samples, stratified by the four major census regions (Northeast, Midwest, South, and West) and day of week (weekend versus weekday), were drawn with a total sample of 14,908 households, yielding 9,386 interviews. The University of Maryland's Research Center conducted survey interviews and requested the following for each activity the respondent performed during a 24-hour period: start and end time of the activity, actual description of the activity, and location where the activity occurred. The activities were initially coded into 11 broad categories and then into 91 micro-categories and 82 locations.

These data were regrouped into five super-categories: household production, providing care, hygiene and personal care, leisure, and employment and education [Expectancy Data 2000]. Further refinement classified these categories into economic allocation of work and leisure. Finally household production time was defined as activities that could produce benefit for all members of the household—housework; food cooking





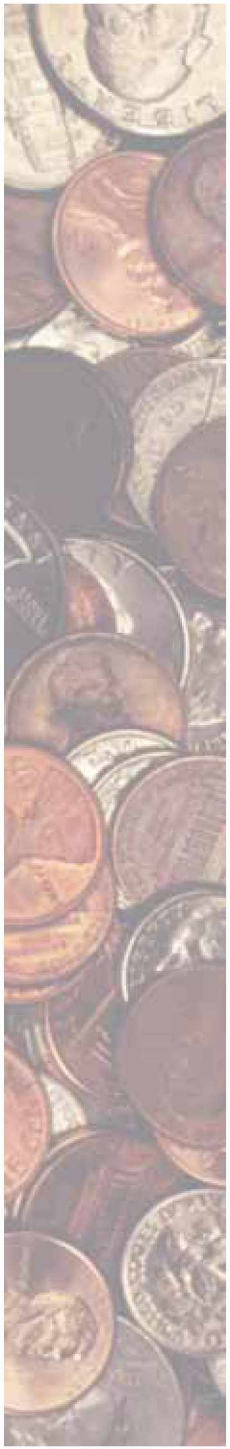
and cleanup; outdoor chores, plants, and animals; home and auto maintenance; and obtaining goods and services. Providing care includes childcare, child guidance, playing with children, transporting children, and providing care to others. This subcategory was defined as the time spent providing services that were channeled toward one or more persons. The market replacement value of this time was reported in 1998 dollars and based on hourly wages plus the employer's legally required benefit costs from the Bureau of Labor Statistics' Occupational Employment Statistics (OES) survey and the employer compensation cost report. Values of time for each subcategory were from a shorter list of the OES occupations that more accurately correlated with those activities involved in household production or providing care. Finally, daily values were distributed by age and sex for each subcategory [Expectancy Data 2000]. For this study, values of household production and providing care were combined within each age and sex category and multiplied by 365 to obtain annual values. Because household production data were unavailable by race and occupation and available only for age and sex, the model assumes that estimates by age and sex were constant or the same for race and occupation group. Dollar values were adjusted using the GDP deflator (see Appendix IX). Because it is not based on a fixed basket of goods and services, the GDP deflator has an advantage over the Consumer Price Index.

For public health evaluations that assume a societal perspective, the social discount rate ("r" in the equation on page 10)—the rate at which society as a whole is willing to exchange present costs for future benefits—is appropriate. The Panel on Cost-Effectiveness in Health and Medicine under the auspices of the U.S. Public Health Service recommended applying a constant real discount rate of 3%, a rate exclusive of adjustment for inflation [DHHS 1996]. This Panel recommended recalculating the cost estimates using alternative discount rates to demonstrate the effect of initial assumptions regarding the appropriate societal rate. Cost estimates using multiple discount rates are presented in Appendix XII.

The overall lifetime societal cost of a traumatic fatal occupational injury is obtained by combining these indirect costs (PVF shown on page 10) with the actual dollar expenditures related to the fatal injury (direct costs). This method provides a conservative estimate of direct costs because medical expenses—only one of the many possible direct costs—was the only direct cost included in the total estimate. Because the majority of fatalities reported through CFOI occurred within one day of the injury event, medical expenses were only included in the first-year calculations.

Discussion

The cost model used for this document produces a conservative estimate for lifetime economic costs of fatal occupational injuries.

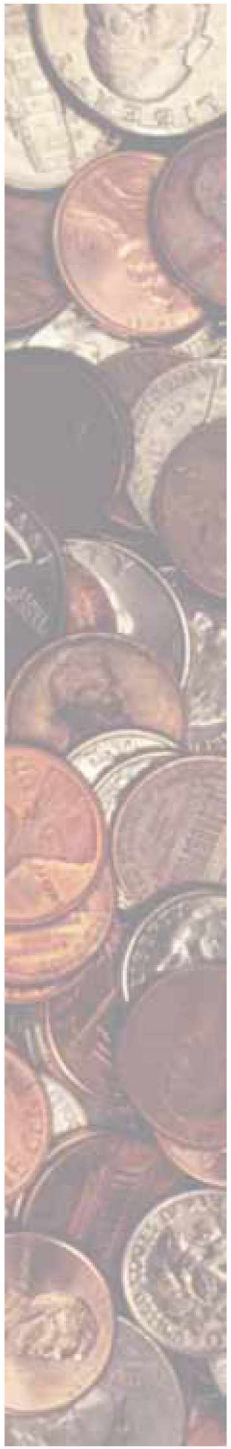


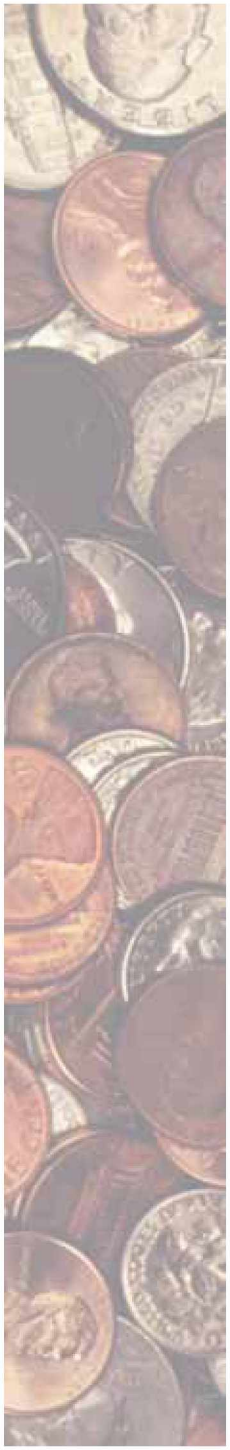
Moreover, these estimates are not exact; they are approximations based on many factors and are subject to limitations of the model specification and limitations associated with the data inputs.

The model specification is limited by not producing a "complete" economic cost of occupational fatalities in that intangible losses that are associated with premature death are not included. While it may be intuitively appealing to provide some quantitative measure of these costs, rather than simply disregard them in determining the overall burden of the fatal injury, it is inescapable that the nature of the losses—pain, suffering, and emotional harm to the injured and the family—involve a subjective and personal component that is difficult to measure, if not immeasurable. It is for this reason that the intangible dimension is not considered in these calculations and such consideration would impose additional complexity and theoretical requirements on a model that is designed to provide a straightforward calculation of well-defined measures of costs associated with fatal occupational injury. A further qualification of the findings of this study is that the use of a single category in the model to represent all direct costs of a fatal occupational injury contributes to the conservative nature of these estimates. Future work should explore inclusion of additional direct costs such as insurance administrative costs, employer retraining, and costs associated with disrupting the work flow because of the fatal incident.

It is recommended that modifications to the model use State-specific estimates, values for multiple-job holders, and age-specific estimates to address the study limitation associated with wage data, which is national in scope, occupation-specific, and of summed-age categories. Improvements in the specificity of benefits data by industry and occupation would greatly improve these cost estimates. Additionally, the accuracy of the estimates would benefit from a comprehensive analysis of the career growth-rate estimates. A longitudinal cohort study would shed needed light on the best method of deriving these estimates for the overall population. However, these improvements would still not correct an overarching limitation of the human capital approach used in this model of the undervaluation of fatalities that result from certain groups of workers—women, the elderly, and minorities—earning lower wages. On the other hand, women may be overvalued given their longer life expectancies; conversely, black males may be undervalued given their shorter life expectancies.

Despite the acknowledged limitations of the estimates contained in these findings, the estimates themselves have substantial practical value, providing valuable additional information about how injuries affect society and providing necessary information for decision-makers on relevant costs of fatal occupational injuries in relation to costs and selection of prevention programs. These cost outcomes additionally represent income





that is not received and medical expenses incurred because of fatal injuries and thus have direct bearing on State, regional, and national economic measures of goods and services production, such as Gross Domestic Product (GDP) and other national income measures. These estimates can be further used to plan, augment, and prioritize occupational injury prevention and control programs, policy analysis, evaluation of safety and health interventions, and advocacy for a safer work environment.

To take full advantage of the usefulness of these estimates, additional detailed studies of the economic impact of individual groups or characteristics associated with the occupational incident should be explored. Future studies could answer such questions as the following:

- What is the relative contribution of each of the components of the cost model? Are the overall costs higher simply because of the number of years that the decedent could have worked or is the occupation of the decedent more influential?

- What are the drivers for the lower cost of younger workers? How much can be explained by the lower wage value assigned? If the assumption that the younger worker does not change occupations were relaxed, what is the effect on the lifetime costs? Will the age categories with the highest mean costs change as our workforce ages?

- What are the underlying reasons for the variation in mean and median costs for different worker and case characteristics?

- Why do certain industries and occupations have higher lifetime costs? Why do mean costs for event or exposure of death vary by industry division? Is it strictly a function of the compensation levels for the employees in those industries?

- Are lifetime costs expected to change based on changing employment and demographic characteristics of the workforce?

Finally, researchers should conduct trend analysis to help determine the best allocation of occupational safety and health resources that are continually becoming more scarce. The goal of the U.S. occupational public health system is to identify the causes of work-related injuries and illnesses, to evaluate the hazards of work practices and new technologies, to develop ways to control these hazards, and to work in conjunction with OSHA by making recommendations for occupational safety and health standards. The use of economic losses, such as those calculated using this model, provides an additional measure to existing societal measures of frequency and rate of injury, to assist in defining the overall dimensions of these tragic and costly outcomes.

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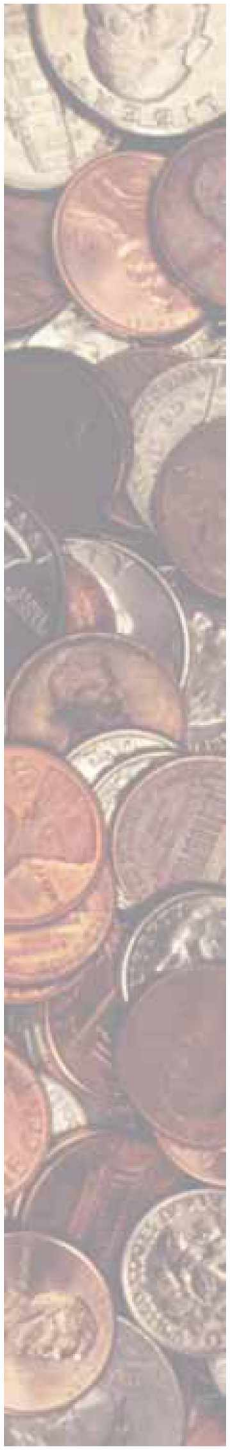

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Table 1. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Year, U.S., 1992–2002

Year of Death	Number of Deaths	Costs		
		Total	Mean	Median
1992	5,833	$4,215,204	$838	$838
1993	5,986	4,510,441	854	869
1994	5,303	4,516,551	837	842
1995	5,959	4,476,975	844	853
1996	5,899	4,310,991	810	818
1997	6,013	4,320,215	818	825
1998	5,840	4,055,880	808	817
1999	5,827	4,127,732	810	832
2000	5,693	4,344,746	858	863
2001	4,664	4,219,665	863	856
2002	5,316	4,677,759	883	885
All years	64,333	53,441,927	831	838

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 2. Number and Lifetime Costs[1] of Fatal Occupational Injuries by State of Injury, U.S., 1992–2002

State of Injury	Number of Deaths	Costs		
		Total	Mean	Median
Alabama	1,465	$1,229,550	$839	$853
Alaska	599	585,187	977	788
Arizona	835	761,244	912	899
Arkansas	926	783,398	846	863
California	6,362	5,426,014	853	851
Colorado	1,168	1,041,997	892	899
Connecticut	435	371,128	853	868
Delaware	143	118,561	829	850
Dist Columbia	167	140,260	840	822
Florida	3,842	3,234,400	842	833
Georgia	2,361	2,011,057	852	843
Hawaii	241	207,947	866	845
Idaho	505	413,662	819	776
Illinois	2,533	2,070,302	817	836
Indiana	1,729	1,424,819	825	850
Iowa	802	560,419	699	750
Kansas	989	738,912	747	788
Kentucky	1,418	1,068,210	754	802
Louisiana	1,568	1,418,367	905	905
Maine	257	206,461	803	796
Maryland	905	768,983	850	847
Massachusetts	710	590,920	833	823
Michigan	1,793	1,543,807	861	852
Minnesota	915	692,331	757	791
Mississippi	1,255	1,027,624	819	824
Missouri	1,571	1,244,182	793	821
Montana	524	$414,011	$790	$780
Nebraska	675	494,974	734	780
Nevada	511	455,167	891	881
New Hampshire	161	148,005	919	924
New Jersey	1,279	1,071,826	839	831
New Mexico	538	486,914	905	948
New York	1,554	1,166,795	751	769
North Carolina	2,104	1,634,361	777	798
North Dakota	279	191,378	686	709
Ohio	2,196	1,806,837	823	847
Oklahoma	1,100	934,828	850	876
Oregon	790	653,508	827	820
Pennsylvania	2,646	2,185,779	826	848
Rhode Island	128	109,602	856	848
South Carolina	1,174	957,937	817	832
South Dakota	337	243,180	722	753
Tennessee	1,688	1,324,517	785	812
Texas	5,442	4,715,047	866	873
Utah	647	584,974	904	923
Vermont	119	95,332	801	779
Virginia	1,615	1,341,440	831	845
Washington	1,116	938,920	841	837
West Virginia	632	556,241	880	880
Wisconsin	1,204	925,586	769	795
Wyoming	344	291,834	848	874

[1]Costs are expressed in thousands of 2003 U.S. dollars.

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 3. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by State of Injury and Year, U.S., 1992–2002

State of Injury	Year of Death																					
	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		2002	
	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total
Alabama	145	$119,258	133	$105,980	153	$120,900	149	$128,698	155	$132,888	135	$109,576	135	$112,261	123	$99,969	101	$82,537	135	$125,010	101	$92,475
Alaska	82	73,148	62	58,554	56	53,925	51	48,288	62	58,847	51	58,992	43	40,825	41	37,631	53	57,715	60	58,749	38	38,514
Arizona	67	59,340	55	48,524	77	64,845	85	91,684	72	60,239	61	52,485	74	63,935	69	59,368	95	86,021	83	78,454	97	96,348
Arkansas	81	67,617	70	60,473	83	67,878	92	75,840	85	71,304	102	90,123	85	70,931	74	62,154	106	87,580	68	56,916	80	72,581
California	604	524,260	627	546,237	615	516,906	625	531,275	611	514,186	622	508,030	596	505,757	576	458,391	540	488,792	495	428,598	451	403,582
Colorado	97	87,143	97	81,767	116	100,062	107	94,993	85	70,983	113	98,817	75	61,836	104	79,950	116	114,386	136	142,402	122	109,659
Connecticut	42	40,997	31	26,465	35	29,332	32	23,956	35	31,236	32	24,360	56	49,650	38	32,587	55	45,762	40	32,175	39	34,608
Delaware	11	9,064	13	12,031	15	12,360	12	8,245	18	13,959	17	14,198	10	6,731	13	11,033	13	12,059	10	8,908	11	9,971
Dist Columbia	8	5,964	25	18,820	21	17,618	15	13,305	19	16,408	21	19,146	13	12,181	14	10,750	13	9,129	11	9,799	7	7,140
Florida	320	266,690	342	292,240	354	286,516	385	314,880	329	261,804	363	288,995	376	318,684	342	271,613	327	305,548	360	327,407	344	300,024
Georgia	199	156,096	223	185,336	245	201,350	230	188,649	210	168,532	239	204,244	195	169,337	223	198,004	193	166,386	210	187,986	194	185,138
Hawaii	25	22,845	23	19,103	18	15,626	20	16,492	25	22,218	18	15,782	11	11,135	32	27,184	18	15,854	31	25,469	20	16,240
Idaho	44	34,334	41	32,949	48	38,883	47	38,666	62	48,953	54	43,454	50	42,929	42	30,078	34	34,687	44	34,641	39	34,089
Illinois	250	203,897	250	194,277	244	190,936	248	203,770	262	211,817	237	185,784	212	171,586	207	161,183	204	180,787	230	203,755	189	162,511
Indiana	147	119,529	135	113,222	194	177,112	155	129,428	142	109,132	189	159,165	154	124,900	171	133,615	157	120,825	151	124,333	134	113,558
Iowa	105	67,772	88	68,684	74	44,257	53	32,793	69	53,124	79	52,763	67	48,861	79	56,797	71	50,565	62	44,094	55	40,709
Kansas	81	56,686	92	71,244	104	75,680	90	69,282	81	56,645	92	67,231	96	71,944	86	57,611	85	70,846	93	71,596	89	70,149
Kentucky	111	82,333	139	108,413	153	107,075	139	88,308	136	99,351	142	101,328	115	89,252	109	86,309	127	110,205	103	80,268	144	115,368
Louisiana	152	136,265	168	155,832	187	165,034	135	121,575	133	122,825	136	117,792	157	138,595	140	123,151	142	135,814	116	108,115	102	93,370
Maine	19	12,199	20	17,176	21	16,170	18	15,479	23	16,113	19	15,968	26	20,261	32	28,819	26	22,076	23	18,009	30	24,193
Maryland	98	85,414	76	66,608	79	65,631	84	69,407	81	60,829	82	67,302	77	67,001	82	62,846	82	71,414	64	58,700	100	93,831
Massachusetts	65	52,834	84	74,700	72	54,426	66	55,579	61	47,330	69	57,142	44	33,963	81	67,211	70	60,245	52	45,185	46	42,305
Michigan	143	130,270	160	133,940	179	161,845	146	123,452	153	125,933	174	146,763	178	143,818	181	149,788	156	132,931	173	159,372	150	135,693
Minnesota	103	77,467	105	74,377	80	57,959	81	56,627	92	65,777	70	53,914	88	61,963	72	57,859	68	47,554	75	64,331	81	74,502
Mississippi	115	81,611	120	91,890	125	103,744	124	93,840	101	73,496	103	86,748	112	92,038	128	106,101	124	109,487	110	102,171	93	86,498
Missouri	139	101,411	129	93,031	150	110,702	125	105,946	138	107,538	123	103,008	143	106,489	163	134,786	146	128,414	141	114,697	174	138,160

See footnote at end of table.

Table 3. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by State of Injury and Year, U.S., 1992–2002 — Continued

State of Injury	Year of Death																					
	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		2002	
	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total
Montana	52	$48,458	38	$27,251	50	$39,280	33	$21,652	49	$33,295	50	$40,641	58	$51,481	46	$32,110	41	$31,351	56	$48,607	51	$39,883
Nebraska	43	31,147	74	55,452	82	61,162	54	36,160	56	38,724	46	25,906	56	41,181	65	55,019	59	44,853	57	39,963	83	65,405
Nevada	49	41,213	36	33,799	39	38,668	50	41,997	50	41,285	55	48,630	46	39,420	58	54,820	45	42,388	38	35,033	45	37,914
New Hampshire	10	11,053	13	12,406	14	13,192	12	11,160	11	7,516	23	22,235	23	18,211	14	11,628	13	13,993	9	6,880	19	19,732
New Jersey	137	112,884	138	104,926	113	97,309	118	97,953	99	82,515	99	83,190	102	75,811	104	84,064	115	104,759	126	115,195	128	113,221
New Mexico	34	29,248	55	48,372	53	48,319	52	42,702	55	50,955	50	38,851	47	42,006	39	36,446	34	34,513	59	57,985	60	57,516
New York	125	101,552	151	102,635	169	129,018	155	120,598	167	120,020	154	110,105	145	90,397	117	80,567	121	98,227	117	99,119	133	114,556
North Carolina	154	114,010	206	157,707	201	157,990	174	131,123	170	128,033	188	135,701	220	168,223	211	162,734	227	178,153	187	165,151	166	135,537
North Dakota	20	16,063	30	19,311	20	14,434	25	15,548	21	12,160	35	24,396	22	15,748	22	15,144	34	19,434	25	17,923	25	21,219
Ohio	201	172,713	189	159,621	207	172,700	185	139,111	201	165,709	200	150,770	183	158,546	219	174,992	204	164,603	208	177,801	199	170,269
Oklahoma	75	70,409	86	74,506	96	68,403	196	194,591	86	73,501	104	78,698	74	53,108	98	78,316	81	63,231	114	102,013	90	78,051
Oregon	87	70,982	84	71,540	80	65,738	72	57,793	85	76,678	84	67,734	72	50,613	69	58,788	51	41,641	43	33,358	63	58,642
Pennsylvania	239	187,086	238	193,494	352	331,667	232	184,105	275	206,050	255	209,320	235	185,772	220	174,204	194	168,698	222	189,094	184	156,289
Rhode Island	17	15,169	16	13,586	12	9,953	11	9,240	6	4,933	11	10,389	12	7,468	11	9,088	7	5,648	17	15,823	8	8,305
South Carolina	100	76,629	86	67,369	82	66,124	112	96,052	107	84,783	128	103,809	111	87,504	139	109,389	115	97,733	87	72,326	107	96,220
South Dakota	27	14,767	26	15,032	30	19,235	26	17,943	32	23,613	23	18,076	28	18,503	45	37,553	33	25,440	33	25,283	34	27,734
Tennessee	143	100,052	153	115,956	168	128,450	178	134,222	142	101,504	167	127,271	150	119,333	154	122,053	160	142,102	133	119,129	140	114,444
Texas	531	453,817	521	448,258	491	410,013	461	386,393	508	421,983	451	380,551	519	439,905	462	381,991	558	500,450	530	509,770	410	381,916
Utah	47	45,975	65	58,245	65	56,876	50	41,995	64	57,346	64	58,263	65	58,075	53	46,325	61	60,222	64	56,367	49	45,285
Vermont	11	10,039	7	4,323	8	7,149	16	14,275	6	4,273	9	5,555	16	11,251	14	12,663	15	10,674	6	5,776	11	9,354
Virginia	151	122,055	124	102,154	158	128,562	124	105,144	149	124,299	164	124,062	171	137,321	149	122,357	144	131,182	143	118,794	138	125,512
Washington	96	81,738	111	93,395	111	88,007	108	91,446	124	101,811	111	96,206	112	101,811	88	74,172	73	62,379	100	82,515	82	65,439
West Virginia	71	61,693	64	49,205	61	51,890	55	50,093	66	60,838	53	47,985	57	49,729	57	46,740	45	45,808	63	56,967	40	35,290
Wisconsin	134	92,336	131	93,984	108	80,250	114	85,648	107	82,249	113	85,090	93	72,485	103	82,236	103	82,370	109	91,431	89	77,509
Wyoming	26	25,983	36	30,905	35	28,138	31	22,255	19	14,378	29	27,318	32	25,469	30	23,854	36	31,157	39	31,912	31	30,466

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 4. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by State of Injury and Year, U.S., 1992–2002

State of Injury	Year of Death																					
	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		2002	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Alabama	$ 822	$806	$797	$834	$790	$814	$864	$858	$857	$907	$812	$848	$832	$855	$813	$823	$817	$876	$926	$928	$916	$922
Alaska	892	720	944	758	963	912	947	732	949	715	1,157	1,163	949	761	918	734	1,089	965	979	813	1,014	832
Arizona	886	834	882	935	842	790	1,079	1,030	837	858	860	863	864	816	860	876	905	926	945	898	993	977
Arkansas	835	879	864	846	818	787	824	824	839	881	884	914	834	819	840	901	826	813	837	824	907	927
California	868	840	871	864	840	836	850	834	842	849	817	825	850	847	796	822	905	916	866	903	899	895
Colorado	898	929	843	776	863	915	888	888	835	827	874	839	824	813	769	826	986	1,012	1,047	1,098	899	908
Connecticut	976	918	854	889	838	766	749	791	892	912	761	878	887	880	858	858	832	844	804	852	887	899
Delaware	824	837	925	885	824	945	687	688	776	701	835	874	673	685	849	864	928	987	891	808	906	1,001
Dist Columbia	745	851	753	694	839	875	887	811	864	842	912	822	937	807	768	812	702	661	891	988	1,020	975
Florida	833	820	855	836	809	811	818	812	796	794	796	784	848	825	794	796	934	917	909	895	875	878
Georgia	784	789	831	798	822	836	820	832	803	793	855	869	868	849	888	871	862	872	895	864	954	908
Hawaii	914	939	831	844	868	874	825	954	889	711	877	720	1,012	796	877	876	881	817	822	855	812	817
Idaho	780	743	804	768	810	791	823	872	790	714	805	767	859	793	716	720	1,020	920	787	783	874	827
Illinois	816	824	777	791	783	800	822	832	808	810	784	815	809	830	779	853	886	917	886	905	860	861
Indiana	813	804	839	865	913	896	835	872	769	815	842	847	811	828	781	839	770	859	823	883	854	917
Iowa	645	713	781	758	598	659	619	714	770	842	668	765	729	779	719	815	712	813	711	737	740	768
Kansas	700	758	774	780	728	774	770	789	699	795	731	798	749	748	670	708	833	865	770	804	788	908
Kentucky	742	696	780	828	700	723	635	690	731	721	714	798	776	814	792	835	868	899	779	857	812	847
Louisiana	896	884	928	936	883	846	901	897	923	896	866	901	883	865	880	885	956	945	932	901	915	954
Maine	642	717	859	816	770	820	860	904	701	642	840	791	779	711	901	800	849	803	783	814	806	807
Maryland	872	913	876	880	831	798	826	844	751	786	821	812	870	827	766	781	871	912	917	936	938	951
Massachusetts	813	772	889	910	756	792	842	804	776	779	828	823	772	778	830	841	861	825	869	922	940	865
Michigan	911	862	837	821	904	881	846	844	823	816	843	855	808	814	828	831	852	887	921	934	905	880
Minnesota	752	764	708	730	724	736	699	742	715	785	770	792	704	761	804	891	699	711	858	893	920	921
Mississippi	710	744	766	816	830	829	757	777	728	738	842	827	822	817	829	832	883	889	929	961	930	880
Missouri	730	780	721	770	738	797	848	829	779	792	837	815	745	783	827	939	880	909	813	831	803	864

See footnote at end of table.

Table 4. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by State of Injury and Year, U.S., 1992–2002 — Continued

State of Injury	Year of Death																					
	1992		1993		1994		1995		1996		1997		1998		1999		2000		2001		2002	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Montana	$932	$822	$717	$819	$786	$784	$656	$663	$679	$674	$813	$853	$888	$831	$698	$704	$765	$827	$868	$794	$782	$812
Nebraska	724	764	749	713	746	682	670	764	692	754	563	636	735	781	846	847	760	790	701	743	798	850
Nevada	841	828	939	925	991	863	840	863	826	835	884	911	857	800	945	891	942	926	922	914	843	861
New Hampshire	1,105	979	954	885	942	937	930	930	683	711	967	1,067	792	816	831	1,003	1,076	1,158	764	810	1,039	924
New Jersey	824	847	760	771	861	841	830	818	833	823	840	829	743	811	808	781	911	867	914	882	892	894
New Mexico	860	849	879	955	912	974	821	799	926	965	777	786	894	952	935	967	1,015	1,054	983	1,037	959	953
New York	812	836	680	748	763	756	778	780	719	695	715	760	623	703	689	741	812	845	847	851	861	870
North Carolina	740	751	766	803	786	794	754	807	753	770	722	776	765	788	771	821	785	783	883	845	821	847
North Dakota	803	904	644	636	722	719	622	662	579	664	697	680	716	716	688	765	572	598	717	801	849	875
Ohio	859	876	845	898	834	851	752	798	824	831	754	806	866	910	799	796	807	856	855	858	856	875
Oklahoma	939	914	866	918	713	725	993	1,012	855	891	757	792	718	767	799	827	781	836	895	955	867	919
Oregon	816	774	852	870	822	826	803	810	902	836	806	812	703	719	852	842	816	809	776	794	931	1,032
Pennsylvania	783	819	813	863	942	915	794	853	749	797	821	864	791	823	792	845	870	878	852	859	854	872
Rhode Island	892	891	849	899	829	848	840	786	822	900	944	844	622	742	826	937	807	800	931	918	1,038	1,022
South Carolina	766	793	783	796	806	842	858	845	792	838	811	816	788	811	787	815	850	893	831	831	916	892
South Dakota	547	506	578	655	641	656	690	745	738	762	786	846	661	829	835	858	771	787	766	897	816	873
Tennessee	700	721	758	787	765	778	754	808	715	770	762	813	796	828	793	817	888	911	896	867	817	822
Texas	855	843	860	896	835	834	838	836	831	846	844	865	848	861	827	865	897	882	962	972	932	895
Utah	978	920	896	871	875	891	840	876	896	906	910	950	893	899	874	959	987	1,015	881	890	924	1,033
Vermont	913	849	618	568	894	764	892	811	712	748	617	779	703	727	905	920	712	556	963	940	850	775
Virginia	808	827	824	790	814	831	848	887	834	845	756	787	803	824	821	847	911	896	831	851	916	921
Washington	851	852	841	806	793	840	847	833	821	824	867	787	909	893	843	837	855	836	825	834	798	841
West Virginia	869	839	769	833	851	875	911	951	922	964	905	850	872	913	820	833	1,018	1,056	904	915	882	850
Wisconsin	689	692	717	722	743	798	751	766	769	702	753	784	779	804	798	838	800	872	839	849	871	927
Wyoming	999	1,076	858	879	804	851	718	941	757	747	942	999	796	877	795	776	865	813	818	828	983	897

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 5. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Sex, Race, and Age Group, U.S., 1992–2002

Demographics	Number of Deaths	Costs		
		Total	Mean	Median
Sex				
Male	59,231	$49,156,834	$830	$838
Female	5,102	4,285,093	840	837
Race				
White	53,636	44,731,836	834	845
Black	6,398	5,127,885	802	809
Other[2]	4,299	3,582,205	834	810
Age Group				
16-17	417	264,590	635	614
18-19	1,171	868,605	742	703
20-24	4,749	4,199,750	885	833
25-34	13,625	14,366,612	1,055	1,009
35-44	16,184	17,301,870	1,069	1,017
45-54	13,638	11,922,436	874	831
55-64	8,863	4,104,143	463	438
65+	5,686	413,921	73	59

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]This category includes cases where the race of the decendent was not known.

Table 6. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries for Sex, Race, and Age Group, by Year, U.S., 1992–2002

Demographics		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Sex												
Male	No.	5,407	5,517	5,789	5,447	5,402	5,547	5,373	5,396	5,257	5,207	4,889
	Total Cost	$4,438,755	4,517,847	4,737,251	4,473,516	4,343,927	4,471,437	4,362,164	4,356,633	4,583,341	4,576,526	4,295,438
Female	No.	426	469	514	512	497	466	467	431	436	457	427
	Total Cost	$342,760	387,459	432,049	417,161	400,615	395,227	396,442	352,555	366,152	412,352	382,321
Race												
White	No.	4,891	4,991	5,292	4,920	4,906	4,952	4,893	4,868	4,795	4,722	4,406
	Total Cost	$4,035,094	4,103,419	4,368,059	4,072,861	3,960,070	4,024,995	3,989,877	3,937,156	4,193,808	4,152,166	3,894,333
Black	No.	568	601	633	635	591	640	564	588	556	550	472
	Total Cost	$436,238	483,060	494,012	493,480	459,379	507,269	452,999	468,366	455,602	479,597	397,881
Other[2]	No.	374	394	378	404	402	421	383	371	342	392	438
	Total Cost	$310,182	318,827	307,228	324,336	325,093	334,400	315,731	303,666	300,083	357,116	385,545
Age Group												
16-17	No.	38	37	40	42	43	41	31	46	43	31	25
	Total Cost	$21,666	22,111	26,281	26,020	25,926	26,417	19,198	28,242	28,817	21,323	18,590
18-19	No.	94	91	100	113	119	103	126	114	114	115	82
	Total Cost	$64,312	64,881	68,975	81,716	84,265	74,237	92,216	85,554	88,622	95,607	68,221
20-24	No.	475	466	496	431	397	466	395	408	410	401	404
	Total Cost	$400,588	404,739	410,491	373,790	339,873	404,253	346,866	361,968	382,970	381,618	392,594
25-34	No.	1,437	1,413	1,457	1,318	1,273	1,264	1,185	1,124	1,109	1,085	960
	Total Cost	$1,486,154	1,450,856	1,500,150	1,353,961	1,266,175	1,307,703	1,230,839	1,181,990	1,239,310	1,253,744	1,095,729
35-44	No.	1,457	1,493	1,561	1,512	1,521	1,476	1,488	1,465	1,422	1,426	1,363
	Total Cost	$1,508,466	1,553,065	1,635,526	1,598,538	1,592,294	1,532,358	1,560,861	1,530,189	1,609,831	1,625,404	1,555,339
45-54	No.	1,130	1,176	1,270	1,218	1,199	1,275	1,238	1,297	1,284	1,323	1,228
	Total Cost	$945,678	1,032,277	1,107,615	1,048,740	1,019,173	1,096,004	1,081,974	1,104,696	1,161,772	1,198,635	1,125,872
55-64	No.	743	787	851	808	837	862	827	804	820	760	764
	Total Cost	$322,533	342,057	386,206	370,979	379,883	387,494	385,804	374,716	400,759	371,368	382,345
65+	No.	459	523	528	517	510	526	550	569	491	523	490
	Total Cost	$32,118	35,320	34,054	36,933	36,953	38,199	40,848	41,833	37,413	41,179	39,070

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]This category includes cases where the race of the decendent was not known.

Table 7. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries for Sex, Race, and Age Group by Year, U.S., 1992–2002

Demographics		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Sex												
Male	Mean Cost	$821	819	818	821	804	806	812	808	872	879	881
	Median Cost	$815	826	818	828	816	826	815	837	883	876	885
Female	Mean Cost	$805	826	841	815	806	848	849	818	840	902	897
	Median Cost	$806	853	837	816	802	832	868	815	842	904	893
Race												
White	Mean Cost	$825	822	825	828	807	813	815	809	875	879	887
	Median Cost	$821	834	831	834	824	835	827	838	884	876	894
Black	Mean Cost	$768	804	780	777	777	793	803	797	819	872	845
	Median Cost	$778	804	784	794	798	808	801	800	859	871	849
Other[2]	Mean Cost	$829	809	813	803	809	794	827	821	877	911	880
	Median Cost	$798	775	799	798	763	777	798	816	854	869	841
Age Group												
16-17	Mean Cost	$570	598	657	620	603	644	619	614	670	688	744
	Median Cost	$540	572	611	618	600	624	605	599	640	640	665
18-19	Mean Cost	$684	713	690	723	708	721	732	750	777	831	832
	Median Cost	$652	701	647	689	675	674	666	708	723	753	775
20-24	Mean Cost	$843	869	828	867	856	867	878	887	934	952	974
	Median Cost	$796	821	787	821	814	831	834	847	870	900	905
25-34	Mean Cost	$1,034	1,027	1,030	1,027	995	1,035	1,039	1,052	1,118	1,156	1,145
	Median Cost	$977	985	974	998	977	1,013	1,000	1,028	1,077	1,134	1,113
35-44	Mean Cost	$1,035	1,040	1,048	1,057	1,047	1,038	1,049	1,044	1,132	1,140	1,145
	Median Cost	$966	988	1,003	1,010	993	1,017	1,001	1,022	1,088	1,121	1,100
45-54	Mean Cost	$837	878	872	861	850	860	874	852	905	906	918
	Median Cost	$785	812	825	823	815	822	823	823	872	873	880
55-64	Mean Cost	$434	435	454	459	454	450	467	466	489	489	504
	Median Cost	$400	407	430	435	430	431	438	454	471	469	491
65+	Mean Cost	$70	68	64	71	72	73	74	74	76	79	80
	Median Cost	$56	54	50	55	58	56	59	58	64	64	62

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]This category includes cases where the race of the decendent was not known.

Table 8. Number and Lifetime Costs[1] of Fatal Occupational Injuries for Race and Age Group, by Sex, U.S., 1992-2002

Demographics	Sex							
	Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Race								
White	49,507	$41,267,483	$834	$846	4,129	$3,464,353	$839	$837
Black	5,801	4,617,853	796	804	597	510,032	856	851
Other[2]	3,923	3,271,498	834	810	376	310,708	826	822
Age Group								
16-17	376	233,205	620	604	41	31,385	765	715
18-19	1,056	769,851	729	689	115	98,754	859	815
20-24	4,374	3,838,796	878	829	375	360,954	963	903
25-34	12,472	13,116,775	1,052	1,008	1,153	1,249,836	1,085	1,031
35-44	14,807	15,901,180	1,074	1,023	1,377	1,400,690	1,017	953
45-54	12,498	11,040,215	884	839	1,140	882,222	774	729
55-64	8,280	3,864,525	467	443	583	239,618	411	393
65+	5,368	392,286	73	60	318	21,635	68	56

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]This category includes cases where the race of the decendent was not known.

Table 9. Number and Lifetime Costs[1] of Fatal Occupational injuries by Age Group and Race, U.S., 1992–2002

Age Group	Race											
	White				Black				Other[2]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
16-17	343	$217,998	$636	$614	26	$16,517	$635	$611	48	$30,075	$627	$608
18-19	990	734,851	742	705	91	68,104	748	711	90	65,650	729	688
20-24	3,923	3,511,786	895	848	388	326,582	842	806	438	361,382	825	774
25-34	11,090	11,860,725	1,070	1,018	1,467	1,452,399	991	959	1,068	1,053,488	986	911
35-44	13,215	14,373,220	1,088	1,032	1,823	1,762,487	967	937	1,146	1,166,163	1,018	981
45-54	11,423	10,137,229	888	841	1,395	1,105,065	792	757	820	680,142	829	793
55-64	7,542	3,523,293	467	442	857	370,944	433	417	464	209,905	452	422
65+	5,110	372,735	73	60	351	25,787	73	59	225	15,399	69	56

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]This category includes cases where the race of the decendent was not known.

Table 10. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Event or Exposure2, U.S., 1992–2002

Event or Exposure	No.	Total Cost	Mean Cost	Median Cost
Transportation Accidents	27,062	$23,017,465	$851	$867
Assaults and Violent Acts	11,021	9,402,451	853	832
Contact with Objects and Equipment	10,570	7,983,334	755	787
Falls	7,355	5,545,944	754	801
Exposure to Harmful Substance and Environments	5,993	5,431,505	907	900
Fires and Explosions	2,041	1,838,306	901	932
Bodily Reaction and Exertion	--	--	--	--
Other Events or Exposures	--	--	--	--
Nonclassifiable	105	76,878	745	750

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 11. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Event or Exposure2 and Year, U.S., 1992–2002

Event or Exposure		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Transportation Accidents	No.	2,326	2,397	2,646	2,464	2,477	2,512	2,550	2,535	2,476	2,389	2,290
	Total Cost	$1,955,512	2,025,559	2,241,438	2,028,179	2,073,592	2,055,604	2,114,120	2,081,978	2,242,814	2,162,534	2,036,135
	Mean Cost	$841	845	847	823	837	818	829	821	906	905	891
	Median Cost	$843	867	851	839	851	848	843	853	930	915	912
Assaults and Violent Acts	No.	1,143	1,163	1,185	1,161	1,067	1,045	910	840	859	856	792
	Total Cost	$934,269	964,564	984,659	982,305	845,559	866,597	799,661	696,997	775,353	790,993	761,494
	Mean Cost	$817	829	831	846	792	829	879	830	903	924	963
	Median Cost	$787	807	813	827	780	808	857	832	885	911	939
Contact with Objects and Equipment	No.	968	1,016	995	888	984	1,019	921	1,011	987	933	848
	Total Cost	$730,263	746,283	731,677	674,624	719,337	761,855	666,605	756,593	770,992	756,352	668,753
	Mean Cost	$754	735	735	760	731	748	724	748	781	811	791
	Median Cost	$758	786	770	793	748	784	760	785	815	827	822
Falls	No.	575	596	642	632	661	685	684	691	711	791	687
	Total Cost	$434,103	453,103	476,144	482,589	476,504	515,672	491,637	518,233	552,203	615,307	530,450
	Mean Cost	$755	760	742	764	721	753	720	751	777	778	774
	Median Cost	$808	804	786	804	766	792	766	803	817	825	836
Exposure to Harmful Substances and Environments	No.	586	577	622	589	517	539	562	513	472	488	528
	Total Cost	$529,745	512,155	539,306	531,100	465,548	483,905	497,915	449,392	442,819	470,267	509,352
	Mean Cost	$904	888	867	902	900	898	886	876	938	964	972
	Median Cost	$895	873	864	888	887	890	898	878	952	963	948

See footnote at end of table.

Table 11. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Year, U.S., 1992–2002— Continued

Event or Exposure		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Fires and Explosions	No.	162	194	193	203	177	193	197	211	170	183	158
	Total Cost	$147,936	171,134	180,892	172,053	151,160	167,105	174,903	187,988	150,161	173,186	161,788
	Mean Cost	$913	882	937	848	854	866	888	891	883	946	1,024
	Median Cost	$955	933	976	871	894	914	882	943	891	978	1,024
Bodily Reaction and Exertion	No.	57	29	10	11	11	--	8	--	12	15	11
	Total Cost	$38,967	21,277	8,384	9,943	8,306	--	6,520	--	11,382	12,178	7,983
	Mean Cost	$684	734	838	904	755	--	815	--	949	812	726
	Median Cost	$665	849	876	857	860	--	766	--	844	834	785
Other Events or Exposures	No.	--	--	--	--	--	--	--	--	--	--	--
	Total Cost	--	--	--	--	--	--	--	--	--	--	--
	Mean Cost	--	--	--	--	--	--	--	--	--	--	--
	Median Cost	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	No.	--	--	--	--	--	12	--	15	--	--	--
	Total Cost	--	--	--	--	--	8,423	--	8,070	--	--	--
	Mean Cost	--	--	--	--	--	702	--	538	--	--	--
	Median Cost	--	--	--	--	--	922	--	597	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 12. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Sex, U.S., 1992–2002

Event or Exposure	Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Transportation Accidents	24,804	$21,020,475	$848	$864	2,258	$1,996,990	$884	$883
Assaults and Violent Acts	9,108	7,784,309	855	836	1,913	1,618,142	846	822
Contact with Objects and Equipment	10,305	7,789,716	756	787	265	193,619	733	780
Falls	7,035	5,357,988	762	804	320	187,957	587	637
Exposure to Harmful Substances and Environments	5,783	5,249,669	908	904	210	181,836	866	842
Fires and Explosions	1,945	1,764,146	907	943	96	74,161	773	815
Bodily Reaction and Exertion	--	--	--	--	--	--	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 13. Number and Lifetime Costs1 of Fatal Occupational Injuries by Event or Exposure[2] and Race, U.S., 1992–2002

Event or Exposure	Race											
	White				Black				Other[3]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Transportation Accidents	23,100	$19,691,626	$853	$873	2,443	$2,016,116	$825	$847	1,519	$1,309,724	$862	$825
Assaults and Violent Acts	8,061	6,955,299	863	852	1,634	1,334,418	817	801	1,326	1,112,734	839	802
Contact with Objects and Equipment	9,061	6,854,024	757	790	973	706,468	727	769	536	422,843	789	784
Falls	6,344	4,784,602	754	802	540	393,393	729	766	471	367,949	785	815
Exposure to Harmful Substances and Environments	5,048	4,641,466	920	921	597	500,293	838	822	348	289,747	833	797
Fires and Explosions	1,777	1,615,726	909	943	182	156,178	858	869	82	66,402	810	838
Bodily Reaction and Exertion	156	119,513	766	793	--	--	--	--	--	--	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]This category includes cases where the race of the decedent was not known.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 14. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Age Group, U.S., 1992–2002

Event or Exposure	Age Group															
	16-17				18-19				20-24				25-34			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Transportation Accidents	178	$115,797	$651	$615	489	$377,634	$772	$740	1,846	$1,712,213	$928	$881	5,455	$6,094,402	$1,117	$1,044
Assaults and Violent Acts	78	47,621	611	575	199	140,347	705	685	771	653,129	847	779	2,485	2,562,854	1,031	1,002
Contact with Objects and Equipment	69	42,816	621	614	214	152,730	714	674	827	687,968	832	781	2,146	2,080,516	970	924
Falls	--	--	--	--	--	--	--	--	476	414,063	872	831	1,336	1,341,729	1,004	959
Exposure to Harmful Substances and Environments	47	28,247	601	605	146	106,248	728	693	647	566,934	876	832	1,701	1,740,495	1,024	998
Fires and Explosions	--	--	--	--	--	--	--	--	172	157,972	918	875	459	498,364	1,086	1,067
Bodily Reaction and Exertion	--	--	--	--	--	--	--	--	--	--	--	--	24	26,255	1,094	1,046
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

See footnote at end of table.

Table 14. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Age Group, U.S., 1992–2002— Continued

Event or Exposure	Age Group															
	35-44				45-54				55-64				65+			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Transportation Accidents	6,492	$7,270,835	$1,120	$1,038	5,869	$5,330,313	$909	$852	4,012	$1,919,508	$479	$454	2,721	$196,764	$72	$59
Assaults and Violent Acts	2,898	3,098,809	1,069	1,032	2,409	2,162,099	898	864	1,411	677,400	480	447	770	60,192	78	64
Contact with Objects and Equipment	2,638	2,593,737	984	955	2,181	1,728,221	792	760	1,491	629,395	422	401	1,004	67,951	68	58
Falls	1,765	1,772,808	1,004	961	1,643	1,345,947	819	782	1,184	519,577	439	425	824	60,794	74	59
Exposure to Harmful Substances and Environments	1,719	1,825,969	1,063	1,041	1,052	928,636	883	865	476	218,931	461	447	205	16,046	78	63
Fires and Explosions	609	673,314	1,106	1,071	406	361,831	891	873	229	111,121	485	474	132	9,960	75	60
Bodily Reaction and Exertion	38	40,792	1,073	1,024	58	49,609	855	840	40	18,656	466	433	15	1,061	71	61
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 15. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Source of Injury[2], U.S., 1992–2002

Source of Injury	Number of Deaths	Total Cost	Mean Cost	Median Cost
Chemicals and Chemical Products	1,568	$1,473,000	$940	$931
Containers	900	702,495	781	816
Furniture and Fixtures	194	157,219	810	820
Machinery	5,312	4,021,238	757	792
Parts and Materials	4,440	4,032,544	908	919
Persons, Plants, Animals and Minerals	3,291	2,202,413	669	703
Structures and Surfaces	8,127	6,274,370	772	812
Tools, Instruments and Equipment	1,414	1,129,885	800	807
Vehicles	27,585	23,514,400	853	873
Other Sources	11,084	9,632,386	869	844
Nonclassifiable	417	301,661	723	772

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.

Table 16. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Year, U.S., 1992–2002

Source of Injury		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Chemicals and Chemical Products	No.	174	157	174	135	139	148	130	155	117	120	119
	Total Cost	$161,300	141,022	157,627	121,237	129,646	137,732	122,526	147,374	114,442	116,051	124,043
	Mean Cost	$927	898	906	898	933	931	943	951	978	967	1,051
	Median Cost	$915	889	915	878	932	934	936	939	999	994	999
Containers	No.	77	77	82	86	93	94	82	71	83	82	73
	Total Cost	$60,842	59,537	63,917	61,816	66,343	72,721	62,547	49,879	73,520	71,095	60,278
	Mean Cost	$790	773	779	719	713	774	763	703	886	867	826
	Median Cost	$843	834	809	776	776	814	776	826	855	851	829
Furniture and Fixtures	No.	21	12	22	14	16	16	18	19	16	25	15
	Total Cost	$18,348	10,510	14,787	11,265	16,308	12,210	14,232	13,702	13,300	18,880	13,676
	Mean Cost	$874	876	672	805	1,019	763	791	721	831	755	912
	Median Cost	$1,026	742	683	865	1,097	789	793	740	843	796	975
Machinery	No.	579	486	487	462	450	540	471	482	476	450	429
	Total Cost	$429,529	342,362	354,508	341,846	337,839	402,921	341,506	365,751	389,363	366,122	349,491
	Mean Cost	$742	704	728	740	751	746	725	759	818	814	820
	Median Cost	$759	740	755	771	780	779	775	813	859	837	841
Parts and Materials	No.	391	450	432	454	401	388	396	386	394	404	344
	Total Cost	$348,485	406,544	377,700	419,140	365,428	339,606	349,090	340,428	362,962	391,380	331,780
	Mean Cost	$891	903	874	923	911	875	882	882	921	969	967
	Median Cost	$913	897	890	924	930	913	898	886	925	973	972
Persons, Plants, Animals and Minerals	No.	368	349	303	281	317	303	260	304	288	258	260
	Total Cost	$249,310	230,122	214,224	196,993	194,190	205,420	168,669	192,807	185,877	182,744	182,058
	Mean Cost	$677	659	707	701	613	678	649	634	645	708	700
	Median Cost	$694	708	757	750	662	699	689	680	695	720	754
Structures and Surfaces	No.	582	642	694	684	750	775	766	766	804	886	778
	Total Cost	$450,622	503,773	528,461	527,103	554,233	593,823	570,266	583,512	633,234	707,993	621,350
	Mean Cost	$774	785	761	771	739	766	745	763	788	799	801
	Median Cost	$824	819	795	802	780	813	776	807	845	842	841

See footnote at end of table.

Table 16. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Year, U.S., 1992–2002— Continued

Source of Injury		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Tools, Instruments and Equipment	No.	142	125	132	130	130	136	122	123	123	115	136
	Total Cost	$106,696	91,388	98,267	103,973	103,761	106,686	99,671	93,170	105,013	101,171	120,088
	Mean Cost	$751	731	744	800	798	784	817	757	854	880	890
	Median Cost	$737	720	771	831	794	787	845	798	877	873	860
Vehicles	No.	2,308	2,452	2,684	2,479	2,513	2,550	2,613	2,618	2,540	2,470	2,358
	Total Cost	$1,953,486	2,073,589	2,272,864	2,053,518	2,099,067	2,103,637	2,170,988	2,158,689	2,299,869	2,237,886	2,090,806
	Mean Cost	$846	846	847	828	835	825	831	825	905	906	889
	Median Cost	$851	871	854	843	851	864	851	861	933	919	916
Other Sources	No.	1,118	1,177	1,237	1,197	1,052	1,027	950	872	829	840	785
	Total Cost	$947,730	1,008,424	1,045,058	1,024,506	853,465	868,692	834,208	743,625	754,846	783,153	768,678
	Mean Cost	$848	857	845	856	811	846	878	853	911	932	980
	Median Cost	$810	843	818	827	798	827	849	851	883	918	954
Nonclassifiable	No.	73	58	56	37	38	36	32	31	23	14	19
	Total Cost	$55,166	37,719	41,886	29,280	24,260	23,217	24,902	20,250	17,067	12,401	15,511
	Mean Cost	$756	650	748	791	638	645	778	653	742	886	816
	Median Cost	$775	700	887	780	693	731	784	681	812	826	866

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.

Table 17. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Sex, U.S., 1992–2002

Source of Injury	Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Chemicals and Chemical Products	1,445	$1,352,706	$937	$931	123	$120,294	$978	$939
Containers	871	681,906	783	817	29	20,589	710	776
Furniture and Fixtures	177	145,594	823	833	17	11,625	684	718
Machinery	5,163	3,911,791	758	792	149	109,447	740	807
Parts and Materials	4,355	3,962,717	910	920	85	69,827	821	837
Persons, Plants, Animals and Minerals	3,084	2,048,372	664	702	207	154,041	744	759
Structures and Surfaces	7,764	6,047,845	779	814	363	226,525	624	705
Tools, Instruments and Equipment	1,152	917,222	797	807	262	212,663	812	807
Vehicles	25,300	21,495,017	850	872	2,285	2,019,384	884	883
Other Sources	9,569	8,343,610	872	851	1,515	1,288,775	851	822
Nonclassifiable	350	249,739	714	763	67	51,923	775	801

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.

Table 18. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Race, U.S., 1992–2002

Source of Injury	Race											
	White				Black				Other[3]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Chemical and Chemical Products	1,330	$1,269,707	$955	$949	154	$129,681	$842	$814	84	$73,612	$876	$817
Containers	753	590,847	785	819	98	74,407	759	805	49	37,242	760	780
Furniture and Fixtures	175	141,020	806	816	9	9,244	1,027	1,103	10	6,955	696	599
Machinery	4,618	3,496,993	758	796	421	316,126	753	791	273	208,119	762	764
Parts and Materials	3,856	3,540,884	919	932	343	282,506	824	816	241	209,153	868	858
Persons, Plants, Animals and Minerals	2,804	1,876,515	669	705	329	214,992	653	678	158	110,906	702	723
Structures and Surfaces	7,009	5,417,141	773	814	611	457,560	749	787	507	399,669	791	815
Tools, Instruments, and Equipment	1,076	864,818	804	818	178	135,085	759	775	160	129,982	812	796
Vehicles	23,543	20,102,488	854	878	2,491	2,059,957	827	851	1,551	1,351,955	872	843
Other Sources	8,142	7,188,345	883	868	1,719	1,419,922	826	805	1,223	1,024,118	837	794
Nonclassifiable	329	242,762	738	780	45	28,405	631	739	43	30,495	709	759

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]This category includes cases where the race of the decedent was not known.

Table 19. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Age Group, U.S., 1992–2002

Source of Injury	Age Group															
	16-17				18-19				20-24				25-34			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Chemical and Chemical Products	7	$4,082	$583	$602	16	$12,340	$771	$742	104	$88,324	$849	$815	371	$388,699	$1,048	$1,014
Containers	8	5,482	685	603	10	7,194	719	699	63	54,077	858	814	167	165,874	993	940
Furniture and Fixtures	--	--	--	--	--	--	--	--	18	16,107	895	825	41	44,492	1,085	1,121
Machinery	39	23,252	596	569	102	70,297	689	668	448	371,454	829	785	1,080	1,061,369	984	941
Parts and Materials	23	14,492	630	623	86	66,395	772	723	442	389,658	882	834	1,160	1,203,456	1,037	1,013
Persons, Plants, Animals and Minerals	--	--	--	--	--	--	--	--	203	160,142	789	739	582	537,224	923	839
Structures and Surfaces	48	32,061	668	640	115	84,188	732	693	569	494,819	871	827	1,555	1,568,315	1,009	966
Tools, Instruments, and Equipment	10	6,459	646	640	45	31,650	703	675	141	119,245	846	792	326	316,349	973	925
Vehicles	172	112,628	655	617	493	381,692	774	748	1,867	1,739,234	932	890	5,618	6,279,886	1,118	1,044
Other Sources	90	54,320	604	579	217	153,986	710	666	879	754,901	859	798	2,666	2,738,250	1,027	995
Nonclassifiable	--	--	--	--	--	--	--	--	15	11,788	786	811	59	62,697	1,063	1,030

See footnotes at end of table.

Table 19. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Age Group, U.S., 1992–2002— Continued

Source of Injury	Age Group															
	35-44				45-54				55-64				65+			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Chemical and Chemical Products	548	$599,958	$1,097	$1,026	329	$309,301	$940	$897	138	$65,498	$475	$458	55	$4,798	$87	$65
Containers	234	243,729	1,042	1,003	198	162,827	822	804	136	57,286	421	405	84	6,025	72	59
Furniture and Fixtures	43	44,399	1,033	1,079	39	33,868	868	824	23	10,293	448	460	21	1,599	76	61
Machinery	1,265	1,263,995	1,000	971	1,075	864,503	804	777	767	330,856	432	412	536	35,511	66	57
Parts and Materials	1,263	1,363,530	1,080	1,068	878	778,065	886	871	435	204,632	470	452	153	12,315	80	63
Persons, Plants, Animals and Minerals	767	694,182	905	819	688	511,635	744	678	525	209,307	399	378	435	28,885	66	57
Structures and Surfaces	2,006	2,028,198	1,011	966	1,775	1,464,782	825	787	1,232	540,213	439	425	827	61,794	75	59
Tools, Instruments, and Equipment	345	343,335	995	949	273	223,973	820	781	179	82,193	459	424	95	6,682	70	63
Vehicles	6,644	7,445,773	1,121	1,039	5,951	5,415,002	910	855	4,043	1,937,342	479	455	2,797	202,844	73	59
Other Sources	2,968	3,168,246	1,067	1,033	2,337	2,083,037	891	859	1,310	630,873	482	454	617	48,772	79	65
Nonclassifiable	101	106,526	1,055	1,010	95	75,442	794	771	74	35,333	477	433	66	4,697	71	61

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 20. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Industry Division, U.S., 1992–2002

Industry Division	No.	Total Cost	Mean Cost	Median Cost
Agriculture, Forestry, and Fishing	8,726	$4,570,982	$524	$601
Mining	1,721	1,787,982	1,039	1,064
Construction	12,075	10,422,364	863	867
Manufacturing	7,705	6,362,329	827	824
Transportation, Communications, and Public Utilities	10,628	9,783,856	921	941
Wholesale Trade	2,638	2,170,175	823	853
Retail Trade	6,689	5,111,422	764	777
Finance, Insurance, and Real Estate	1,097	951,459	867	903
Services	8,964	8,037,428	897	870
Public Administration	3,592	3,855,617	1,073	1,157
Nonclassifiable	498	388,312	781	856

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 21. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Industry Division and Year, U.S., 1992–2002

Industry Division		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Agriculture, Forestry, and Fishing	No.	794	848	842	788	791	820	813	797	711	739	783
	Total Cost	$373,538	406,854	392,360	397,942	404,856	423,376	431,237	410,885	414,918	435,002	480,014
	Mean Cost	$470	480	466	505	512	516	530	516	584	589	613
	Median Cost	$549	568	540	569	584	597	590	602	651	672	712
Mining	No.	179	174	179	157	154	158	147	123	156	171	123
	Total Cost	$185,723	177,169	176,679	164,433	159,423	150,992	146,175	114,473	177,102	197,571	138,243
	Mean Cost	$1,038	1,018	987	1,047	1,035	956	994	931	1,135	1,155	1,124
	Median Cost	$1,043	1,019	1,015	1,047	1,073	1,023	1,061	1,002	1,177	1,227	1,131
Construction	No.	941	951	1,053	1,074	1,070	1,106	1,187	1,193	1,152	1,234	1,114
	Total Cost	$821,972	834,861	910,746	943,447	893,323	958,300	955,065	994,890	998,100	1,100,191	1,011,469
	Mean Cost	$874	878	865	878	835	866	805	834	866	892	908
	Median Cost	$885	895	863	842	842	845	811	854	896	876	887
Manufacturing	No.	758	757	782	711	721	742	695	724	662	593	560
	Total Cost	$614,813	633,138	683,447	578,935	586,268	597,629	566,547	597,164	545,497	501,500	457,394
	Mean Cost	$811	836	874	814	813	805	815	825	824	846	841
	Median Cost	$789	827	841	825	791	802	822	813	838	851	843
Transportation, Communications, and Public Utilities	No.	904	900	965	932	989	1,036	958	1,043	988	952	961
	Total Cost	$829,922	828,222	897,672	841,008	874,182	903,285	858,490	947,907	959,883	941,627	901,657
	Mean Cost	$918	920	930	902	884	872	896	909	972	989	938
	Median Cost	$908	923	922	922	914	904	928	948	998	1,045	994
Wholesale Trade	No.	254	248	269	251	266	238	226	233	230	218	205
	Total Cost	$203,303	205,059	221,798	194,434	214,949	195,895	182,893	189,516	191,714	190,640	179,974
	Mean Cost	$800	827	825	775	808	823	809	813	834	874	878
	Median Cost	$813	873	860	821	846	862	827	853	871	950	890
Retail Trade	No.	678	734	739	636	642	648	551	496	567	526	472
	Total Cost	$528,630	556,085	556,509	471,452	464,786	476,613	447,278	364,762	448,846	402,415	394,046
	Mean Cost	$780	758	753	741	724	736	812	735	792	765	835
	Median Cost	$772	759	766	756	722	752	827	771	816	789	850

See footnote at end of table.

Table 21. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Industry Division and Year, U.S., 1992–2002— Continued

Industry Division		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Finance, Insurance, and Real Estate	No.	113	111	111	121	111	97	91	102	79	81	80
	Total Cost	$95,425	91,203	104,270	103,633	97,453	82,852	77,595	91,213	58,842	81,017	67,957
	Mean Cost	$844	822	939	856	878	854	853	894	745	1,000	849
	Median Cost	$855	821	993	863	974	947	899	992	781	1,034	872
Services	No.	814	843	887	801	827	794	812	787	828	840	731
	Total Cost	$735,913	749,105	763,109	692,386	735,686	692,646	722,480	668,607	783,599	783,625	710,273
	Mean Cost	$904	889	860	864	890	872	891	850	946	933	972
	Median Cost	$843	857	805	818	856	850	865	861	934	914	957
Public Administration	No.	336	345	357	429	276	345	328	295	302	298	281
	Total Cost	$347,501	368,347	366,683	455,066	274,902	360,554	347,622	303,550	356,855	342,702	331,837
	Mean Cost	$1,034	1,068	1,027	1,061	996	1,045	1,060	1,029	1,182	1,150	1,181
	Median Cost	$1,110	1,165	1,123	1,135	1,066	1,121	1,164	1,114	1,276	1,258	1,282
Nonclassifiable	No.	62	75	119	59	52	29	32	34	18	12	6
	Total Cost	$44,776	55,265	96,028	47,941	38,714	24,523	23,225	26,222	14,136	12,587	4,895
	Mean Cost	$722	737	807	813	744	846	726	795	785	1,049	816
	Median Cost	$832	922	868	831	837	908	819	861	886	1,190	839

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 22. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Industry Division and Sex, U.S., 1992–2002

Industry Division	Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Agriculture, Forestry, and Fishing	8,458	$4,413,964	$522	$599	268	$157,017	$586	$667
Mining	1,700	1,768,190	1,040	1,066	21	19,792	942	962
Construction	11,900	10,268,582	863	866	175	153,782	879	873
Manufacturing	7,269	6,001,213	827	822	436	361,116	830	850
Transportation, Communications, and Public Utilities	10,087	9,303,025	922	943	541	480,831	889	892
Wholesale Trade	2,501	2,048,396	819	851	137	121,779	889	886
Retail Trade	5,481	4,215,621	769	781	1,208	895,802	742	771
Finance, Insurance, and Real Estate	838	711,322	849	842	259	240,137	927	984
Services	7,318	6,591,007	901	873	1,646	1,446,422	879	863
Public Administration	3,209	3,468,079	1,081	1,167	383	387,538	1,012	1,068
Nonclassifiable	470	367,434	783	859	28	20,878	746	853

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 23. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Industry Division and Race, U.S., 1992–2002

Industry Division	Race											
	White				Black				Other[2]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Agriculture, Forestry, and Fishing	7,763	$3,988,390	$514	$583	381	$213,662	$561	$624	582	$368,929	$634	$678
Mining	1,594	1,656,721	1,039	1,065	62	66,320	1,070	1,063	65	64,941	999	1,003
Construction	10,422	9,074,333	871	876	938	745,162	794	821	715	602,870	843	846
Manufacturing	6,384	5,347,805	840	833	946	707,463	749	785	375	307,062	819	780
Transportation, Communications, and Public Utilities	8,580	7,973,129	929	950	1,474	1,246,847	846	864	574	563,880	982	985
Wholesale Trade	2,272	1,881,491	828	864	208	158,900	764	824	158	129,784	821	814
Retail Trade	4,925	3,724,579	756	780	769	582,072	757	762	995	804,771	809	778
Finance, Insurance, and Real Estate	944	815,471	864	904	90	77,680	863	842	63	58,307	926	944
Services	7,357	6,701,153	911	897	1,038	850,084	819	801	569	486,191	856	805
Public Administration	3,007	3,268,232	1,087	1,165	430	434,047	1,009	1,104	155	153,338	989	1,050
Nonclassifiable	388	300,532	775	846	62	45,648	736	811	48	42,131	896	977

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]This category includes cases where the race of the decendent was not known.

Table 24. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Industry Division and Age Group, U.S., 1992–2002

Industry Division		Age Group							
		16-17	18-19	20-24	25-34	35-44	45-54	55-64	65+
Agriculture, Forestry, and Fishing	No.	105	152	552	1,290	1,580	1,400	1,425	2,222
	Total Cost	$57,808	95,858	393,932	1,060,977	1,333,883	980,553	512,740	135,230
	Mean Cost	$551	631	714	822	844	700	360	61
	Median Cost	$531	584	664	727	732	630	338	55
Mining	No.	--	--	156	422	509	386	155	60
	Total Cost	--	--	164,605	500,119	622,534	379,294	86,209	5,356
	Mean Cost	--	--	1,055	1,185	1,223	983	556	89
	Median Cost	--	--	1,075	1,192	1,250	978	563	70
Construction	No.	90	283	1,151	3,000	3,360	2,352	1,335	504
	Total Cost	$59,133	208,138	1,002,040	3,033,404	3,463,242	1,985,025	630,075	41,307
	Mean Cost	$657	735	871	1,011	1,031	844	472	82
	Median Cost	$629	707	830	980	995	808	461	62
Manufacturing	No.	24	144	547	1,606	2,087	1,738	1,173	386
	Total Cost	$15,792	101,943	457,674	1,602,728	2,160,790	1,456,477	536,078	30,847
	Mean Cost	$658	708	838	1,000	1,038	839	459	80
	Median Cost	$618	682	807	939	975	790	433	64
Transportation, Communications, and Public Utilities	No.	16	79	503	2,162	2,942	2,829	1,583	514
	Total Cost	$11,666	64,711	499,681	2,488,666	3,309,184	2,582,426	782,095	45,428
	Mean Cost	$729	819	993	1,151	1,125	913	494	88
	Median Cost	$750	736	938	1,052	1,041	861	483	65
Wholesale Trade	No.	12	39	208	534	660	559	399	227
	Total Cost	$7,747	28,506	183,176	557,007	694,726	489,135	191,728	18,150
	Mean Cost	$646	731	881	1,043	1,053	875	481	80
	Median Cost	$598	735	846	1,007	1,006	849	466	66
Retail Trade	No.	96	216	623	1,434	1,524	1,347	872	577
	Total Cost	$59,175	154,924	504,506	1,374,559	1,497,500	1,089,694	388,385	42,679
	Mean Cost	$616	717	810	959	983	809	445	74
	Median Cost	$607	725	775	947	991	813	422	63

See footnotes at end of table.

Table 24. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Industry Division and Age Group, U.S., 1992–2002— Continued

Industry Division		Age Group							
		16-17	18-19	20-24	25-34	35-44	45-54	55-64	65+
Finance, Insurance, and Real Estate	No.	--	--	43	179	246	287	184	155
	Total Cost	--	--	41,765	214,552	297,442	287,636	95,879	12,381
	Mean Cost	--	--	971	1,199	1,209	1,002	521	80
	Median Cost	--	--	858	1,201	1,192	997	493	68
Services	No.	51	179	719	1,927	2,201	1,843	1,251	793
	Total Cost	$35,685	144,647	680,478	2,181,679	2,560,746	1,749,880	620,731	63,582
	Mean Cost	$700	808	946	1,132	1,163	949	496	80
	Median Cost	$652	767	877	1,054	1,084	881	455	64
Public Administration	No.	11	34	217	978	958	813	416	165
	Total Cost	$8,673	30,869	242,623	1,254,116	1,230,876	847,661	227,768	13,031
	Mean Cost	$788	908	1,118	1,282	1,285	1,043	548	79
	Median Cost	$744	935	1,134	1,294	1,304	1,040	534	66
Nonclassifiable	No.	10	11	30	93	117	84	70	83
	Total Cost	$7,479	8,774	29,270	98,803	130,948	74,654	32,456	5,929
	Mean Cost	$748	798	976	1,062	1,119	889	464	72
	Median Cost	$780	854	942	1,055	1,068	851	436	62

[1]Costs are expressed in thousands of 2003 U.S. dollars.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 25. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Event or Exposure and Industry Division, U.S., 1992–2002

Event or Exposure	Industry Division											
	Agriculture, Forestry, and Fishing		Mining		Construction		Manufacturing		Transportation, Communications, and Public Utilities		Wholeseale Trade	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Transportation Accidents	4,426	$2,284,844	521	$517,579	3,338	$2,841,652	2,274	$1,982,342	7,409	$6,917,436	1,407	$1,195,295
Assaults and Violent Acts	601	319,275	30	32,570	347	321,319	622	604,692	988	837,201	317	272,216
Contact with Objects and Equipment	2,023	983,310	653	704,635	2,279	1,928,874	2,879	2,152,280	892	744,255	471	364,995
Falls	656	346,295	135	132,419	3,726	3,085,946	658	491,779	427	351,712	192	125,458
Exposure to Harmful Substances and Environments	870	564,010	179	188,552	2,033	1,929,459	725	645,820	698	727,478	142	127,748
Fires and Explosions	129	62,688	192	201,526	315	284,353	489	439,885	179	177,048	98	75,082
Bodily Reaction and Exertion	7	4,500	--	--	20	16,177	41	34,032	21	15,836	7	6,350
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 25. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Event or Exposure and Industry Division, U.S., 1992–2002— Continued

Event or Exposure	Industry Division									
	Retail Trade		Finance, Insurance, and Real Estate		Services		Public Administration		Nonclassifiable	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Transportation Accidents	1,529	$1,215,212	403	$381,299	3,709	$3,572,311	1,815	$1,917,646	231	$191,851
Assaults and Violent Acts	4,231	3,267,945	427	388,075	2,325	2,081,899	1,045	1,206,650	88	70,609
Contact with Objects and Equipment	279	204,274	49	38,694	823	678,517	163	145,429	59	38,071
Falls	310	162,874	123	68,968	908	608,188	163	133,035	57	39,269
Exposure to Harmful Substances and Environments	201	165,240	80	64,583	849	798,177	173	184,403	43	36,035
Fires and Explosions	118	85,058	10	7,154	285	248,059	217	252,633	9	4,821
Bodily Reaction and Exertion	13	6,536	--	--	50	37,580	13	12,723	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--	6	3,598

[1]Costs are expressed in thousands of 2003 U.S. dollars.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 26. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Industry Division, U.S., 1992–2002

Event or Exposure	Industry Division													
	Agriculture, Forestry, and Fishing		Mining		Construction		Manufacturing		Transportation, Communications, and Public Utilities		Wholesale Trade		Retail Trade	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Transportation Accidents	$516	$574	$993	$1,012	$851	$855	$874	$859	$934	$954	$850	$914	$795	$845
Assaults and Violent Acts	531	617	1,086	1,048	926	923	974	935	847	851	859	873	772	764
Contact with Objects and Equipment	486	569	1,079	1,129	846	847	748	775	834	868	775	803	732	774
Falls	528	605	981	1,011	828	851	750	772	824	847	653	698	525	560
Exposure to Harmful Substances and Environments	648	680	1,053	1,057	949	953	896	907	1,042	1,059	900	913	822	824
Fires and Explosions	486	510	1,050	1,069	903	935	900	891	989	1,008	766	811	721	756
Bodily Reaction and Exertion	643	641	--	--	809	857	830	860	754	775	907	894	503	612
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 26. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Industry Division, U.S., 1992–2002— Continued

Event or Exposure	Industry Division							
	Finance, Insurance, and Real Estate		Services		Public Admininistration		Nonclassifiable	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Transportation Accidents	$946	$1,009	$963	$967	$1,057	$1,139	$831	$891
Assaults and Violent Acts	909	970	895	830	1,155	1,222	802	897
Contact with Objects and Equipment	790	740	824	847	892	850	645	715
Falls	561	625	671	716	816	872	701	843
Exposure to Harmful Substances and Environments	807	811	940	902	1,066	1,129	838	831
Fires and Explosions	715	898	870	870	1,164	1,240	536	684
Bodily Reaction and Exertion	--	--	752	659	979	1,024	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	600	541

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 27. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Source of Injury[2] and Industry Division, U.S., 1992–2002

Source of Injury	Industry Division													
	Agriculture, Forestry, and Fishing		Mining		Construction		Manufacturing		Transportation, Communications, and Public Utilities		Wholesale Trade		Retail Trade	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Chemical and Chemical Products	131	$98,687	90	$89,788	213	$193,249	301	$274,636	193	$196,950	59	$53,887	102	$88,011
Containers	118	50,675	37	39,014	140	115,828	240	200,338	123	98,390	76	57,737	47	30,272
Furniture and Fixtures	--	--	7	6,477	52	48,077	28	22,467	12	8,438	--	--	23	13,291
Machinery	1,221	587,758	340	353,886	1,413	1,194,634	1,272	1,042,365	285	243,030	192	149,136	82	61,481
Parts and Materials	347	216,813	209	221,746	1,639	1,551,769	776	664,056	532	536,329	146	134,766	215	170,742
Persons, Plants, Animals and Minerals	868	434,043	135	141,455	367	302,186	1,081	688,748	153	120,450	80	45,727	127	79,177
Structures and Surfaces	668	353,088	227	243,630	4,183	3,484,383	681	517,247	461	387,280	202	131,726	348	191,304
Tools, Instruments, and Equipment	122	81,854	14	15,164	265	235,877	105	82,602	91	77,117	30	23,839	410	291,618
Vehicles	4,491	2,306,620	494	495,098	3,032	2,609,841	2,319	2,040,846	7,697	7,174,457	1,520	1,290,484	1,626	1,292,776
Other Sources	735	431,548	155	168,695	723	642,530	851	790,004	1,043	912,843	320	271,406	3,602	2,825,962
Nonclassifiable	--	--	13	13,030	48	43,991	51	39,021	38	28,572	--	--	107	66,788

See footnotes at end of table.

Table 27. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Source of Injury[2] and Industry Division, U.S., 1992–2002— Continued

Source of Injury	Industry Division							
	Finance, Insurance, and Real Estate		Services		Public Administration		Nonclassifiable	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Chemical and Chemical Products	29	$25,478	395	$398,460	34	$35,392	21	$18,462
Containers	--	--	90	86,533	22	19,711	--	--
Furniture and Fixtures	--	--	52	42,220	9	8,506	--	--
Machinery	34	23,765	354	288,771	91	62,585	28	13,826
Parts and Materials	45	41,496	442	406,188	66	65,516	23	23,123
Persons, Plants, Animals and Minerals	44	28,034	335	277,604	83	74,435	18	10,554
Structures and Surfaces	133	78,088	976	680,256	190	166,687	58	40,681
Tools, Instruments, and Equipment	36	33,527	285	234,117	50	48,897	6	5,273
Vehicles	407	388,916	3,948	3,783,297	1,813	1,933,077	238	198,989
Other Sources	348	320,179	1,992	1,768,987	1,225	1,432,167	90	68,063
Nonclassifiable	14	8,000	95	70,996	9	8,643	10	6,568

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 28. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Industry Division, U.S., 1992–2002

Source of Injury	Industry Division																					
	Agriculture, Forestry, and Fishing		Mining		Construction		Manufacturing		Transportation, Communications, and Public Utilities		Wholesale Trade		Retail Trade		Finance, Insurance, and Real Estate		Services		Public Administration		Nonclassifiable	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Chemical and Chemical Products	$753	$711	$998	$990	$907	$895	$915	$909	$1,020	$1,019	$913	$941	$863	$900	$879	$867	$1,009	$959	$1,041	$986	$879	$959
Containers	429	481	1,054	1,073	827	867	835	844	800	838	760	807	644	723	--	--	961	866	896	869	--	--
Furniture and Fixtures	--	--	925	1,152	925	994	802	751	703	748	--	--	578	593	--	--	812	897	945	1,116	--	--
Machinery	481	558	1,041	1,073	845	862	821	825	853	842	777	813	750	760	699	724	816	808	688	763	494	429
Parts and Materials	625	683	1,061	1,078	947	956	857	868	1,008	1,061	923	891	794	786	922	904	919	902	993	1,033	1,005	977
Persons, Plants, Animals and Minerals	500	598	1,048	1,106	823	831	637	691	787	799	572	658	623	684	637	609	829	815	897	893	586	700
Structures and Surfaces	529	602	1,073	1,131	833	849	762	789	840	862	652	694	550	600	587	642	698	733	877	907	714	841
Tools, Instruments, and Equipment	671	693	1,083	1,103	890	868	794	807	847	874	795	792	711	725	931	990	821	810	978	1,073	879	849
Vehicles	514	568	1,002	1,017	861	859	883	882	932	954	849	914	795	847	956	1,013	958	967	1,066	1,146	836	909
Other Sources	587	656	1,088	1,080	889	887	929	908	875	863	848	845	785	771	920	975	888	826	1,169	1,237	756	850
Nonclassifiable	--	--	1,002	1,248	916	959	765	822	752	785	--	--	624	726	571	572	747	769	960	1,040	657	711

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 29. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Occupation Division, U.S., 1992–2002

Occupation Division	Number of Deaths	Costs		
		Total	Mean	Median
Management and Professional Specialty	7,126	$8,130,518	$1,141	$1,220
Technical, Sales and Administrative Support	7,865	7,326,365	932	921
Service	5,312	4,413,166	831	786
Farming, Forestry and Fishing	9,633	4,771,284	495	599
Precision Production, Craft and Repair	11,876	11,156,458	940	990
Operators, Fabricators and Laborers	22,059	17,296,575	784	825
Nonclassifiable	462	347,560	752	913

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 30. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Occupation Division and Year, U.S., 1992–2002

Occupation Division		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Management and Professional Speciality	No.	680	669	753	693	705	657	635	589	628	617	500
	Total Cost	$770,691	754,051	873,401	778,854	773,584	718,973	705,991	655,681	731,572	725,604	642,117
	Mean Cost	$1,133	1,127	1,160	1,124	1,097	1,094	1,114	1,113	1,165	1,176	1,287
	Median Cost	$1,177	1,214	1,251	1,178	1,187	1,178	1,220	1,183	1,253	1,252	1,366
Technical, Sales and Administrative Support	No.	804	790	896	782	742	725	658	596	666	629	577
	Total Cost	$748,890	734,260	826,579	698,091	669,006	640,270	646,011	541,748	662,959	597,363	561,187
	Mean Cost	$931	929	923	893	902	883	982	909	995	950	978
	Median Cost	$960	905	896	877	907	887	960	896	931	909	986
Service	No.	517	526	566	516	474	479	421	449	415	481	468
	Total Cost	$404,462	425,106	452,257	417,200	351,477	392,363	363,760	358,599	385,098	433,181	429,664
	Mean Cost	$782	808	799	809	742	819	864	800	928	901	920
	Median Cost	$758	776	760	768	723	775	806	768	848	846	892
Farming, Forestry and Fishing	No.	916	950	933	853	871	908	903	884	793	794	828
	Total Cost	$423,940	441,359	418,675	408,848	424,101	440,030	443,763	439,135	419,123	433,744	478,565
	Mean Cost	$463	465	449	479	487	485	491	497	529	546	578
	Median Cost	$565	582	557	572	594	588	582	602	626	653	698
Precision Production, Craft and Repair	No.	1,055	1,087	1,079	1,035	1,062	1,069	1,074	1,120	1,085	1,127	1,083
	Total Cost	$997,827	1,006,589	1,008,574	988,680	970,931	997,130	948,128	1,006,675	1,031,424	1,126,900	1,073,600
	Mean Cost	$946	926	935	955	914	933	883	899	951	1,000	998
	Median Cost	$977	974	960	998	988	993	943	984	1,006	1,049	1,037
Operators, Fabricators and Laborers	No.	1,836	1,895	2,006	2,017	1,984	2,123	2,119	2,155	2,066	2,005	1,853
	Total Cost	$1,418,187	1,492,966	1,537,142	1,553,637	1,511,004	1,637,404	1,629,330	1,683,281	1,684,673	1,662,046	1,486,905
	Mean Cost	$772	788	766	770	762	771	769	781	815	829	804
	Median Cost	$812	834	805	810	811	813	804	828	865	858	852
Nonclassifiable	No.	25	69	70	63	61	52	30	34	40	11	7
	Total Cost	$17,518	50,974	52,671	45,367	44,439	40,496	21,623	24,068	34,644	10,040	5,720
	Mean Cost	$701	739	752	720	729	779	721	708	866	913	817
	Median Cost	$916	922	891	874	892	935	839	877	1,006	1,086	916

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 31. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Occupation Division and Sex, U.S., 1992–2002

Occupation Division	Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Management and Professional Speciality	5,873	$6,772,278	$1,154	$1,241	1,253	$1,358,240	$1,084	$1,153
Technical, Sales and Administrative Support	6,261	6,037,160	965	967	1,604	1,289,206	804	824
Service	4,391	3,748,418	854	794	921	664,749	722	758
Farming, Forestry and Fishing	9,370	4,631,167	494	599	263	140,117	533	635
Precision Production, Craft and Repair	11,741	11,033,321	940	990	135	123,137	912	956
Operators, Fabricators and Laborers	21,175	16,618,744	785	824	884	677,832	768	828
Nonclassifiable	420	315,747	752	913	42	31,814	757	913

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 32. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Occupation Division and Race, U.S., 1992–2002

Occupation Division	Race											
	White				Black				Other[2]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Management and Professional Speciality	6,218	$7,130,684	$1,147	$1,230	465	$507,339	$1,091	$1,132	443	$492,495	$1,114	$1,147
Technical, Sales and Administrative Support	6,412	6,065,761	946	945	588	488,344	831	827	865	772,260	893	867
Service	4,090	3,469,796	849	801	841	675,216	803	766	381	268,154	706	711
Farming, Forestry and Fishing	8,488	4,118,222	485	583	523	274,261	524	610	622	378,801	609	672
Precision Production, Craft and Repair	10,456	9,880,745	946	997	825	733,402	889	942	595	542,311	911	953
Operators, Fabricators and Laborers	17,653	13,829,229	784	828	3,093	2,399,146	776	808	1,313	1,068,201	814	819
Nonclassifiable	319	237,401	744	907	63	50,176	796	925	80	59,984	750	909

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]This category includes cases where the race of the decendent was not known.

Table 33. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Occupation Division and Age Group, U.S., 1992–2002.

Occupation Division		Age Group							
		16-17	18-19	20-24	25-34	35-44	45-54	55-64	65+
Management and Professional Speciality	No.	9	36	280	1,217	1,842	1,881	1,210	651
	Total Cost	$8,798	39,185	352,014	1,816,311	2,786,856	2,269,593	790,361	67,400
	Mean Cost	$978	1,088	1,257	1,492	1,514	1,207	653	104
	Median Cost	$869	1,085	1,255	1,500	1,534	1,196	648	85
Technical, Sales and Administrative Support	No.	36	151	524	1,675	1,901	1,763	1,133	682
	Total Cost	$23,404	115,534	516,557	2,015,282	2,292,818	1,726,061	581,539	55,172
	Mean Cost	$650	765	986	1,203	1,207	980	514	81
	Median Cost	$643	732	941	1,154	1,165	926	475	66
Service	No.	59	122	503	1,454	1,269	973	555	377
	Total Cost	$36,529	88,829	433,303	1,538,732	1,298,899	773,456	219,139	24,280
	Mean Cost	$619	728	861	1,058	1,024	795	396	65
	Median Cost	$573	648	764	1,081	895	695	373	51
Farming, Forestry and Fishing	No.	111	175	623	1,475	1,814	1,541	1,581	2,313
	Total Cost	$60,967	105,944	423,072	1,119,190	1,409,611	981,521	533,013	137,968
	Mean Cost	$549	605	679	759	777	637	337	60
	Median Cost	$531	583	664	724	723	613	331	55
Precision Production, Craft and Repair	No.	33	152	906	2,837	3,457	2,628	1,400	463
	Total Cost	$23,830	129,225	885,848	3,143,199	3,859,987	2,386,024	689,894	38,450
	Mean Cost	$722	850	978	1,109	1,118	908	493	83
	Median Cost	$687	814	957	1,091	1,105	899	502	65
Operators, Fabricators and Laborers	No.	154	518	1,876	4,897	5,807	4,773	2,925	1,109
	Total Cost	$99,182	374,731	1,552,394	4,657,030	5,551,352	3,715,973	1,261,663	84,252
	Mean Cost	$644	723	828	951	956	779	431	76
	Median Cost	$625	694	811	951	962	768	436	60
Nonclassifiable	No.	15	17	37	70	94	79	59	91
	Total Cost	$11,880	15,158	36,562	76,870	102,349	69,807	28,534	6,400
	Mean Cost	$792	892	988	1,098	1,089	884	484	70
	Median Cost	$782	874	976	1,094	1,099	894	511	62

[1]Costs are expressed in thousands of 2003 U.S. dollars.

Table 34. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Event or Exposure[2] and Occupation Division, U.S., 1992–2002

Event or Exposure	Occupation Division													
	Management and Professional Speciality		Technical, Sales and Administrative Support		Service		Farming, Forestry and Fishing		Precision Production, Craft and Repair		Operators, Fabricators and Laborers		Nonclassifiable	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Transportation Accidents	3,170	$3,769,676	3,484	$3,874,018	1,709	$1,528,390	4,361	$2,004,461	2,392	$2,250,967	11,772	$9,461,958	174	$127,994
Assaults and Violent Acts	2,214	2,454,014	3,407	2,670,017	2,237	1,899,886	619	310,816	750	680,890	1,695	1,305,882	99	80,946
Contact with Objects and Equipment	479	530,591	280	228,528	217	147,083	2,931	1,492,139	2,452	2,347,972	4,151	3,194,438	60	42,584
Falls	629	576,664	333	210,097	483	262,713	665	329,828	3,192	2,748,466	1,994	1,375,850	59	42,326
Exposure to Harmful Substances and Environments	461	593,414	224	226,370	364	270,641	908	567,518	2,357	2,407,853	1,638	1,328,377	41	37,332
Fires and Explosions	130	160,397	106	94,093	267	281,348	128	56,314	676	674,126	721	565,235	13	6,792
Bodily Reaction and Exertion	30	31,751	20	13,333	29	20,073	--	--	35	26,872	61	44,749	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 35. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Occupation Division, U.S., 1992–2002

Event or Exposure	Occupation Division													
	Management and Professional Speciality		Technical, Sales and Administrative Support		Service		Farming, Forestry and Fishing		Precision Production, Craft and Repair		Operators, Fabricators and Laborers		Nonclassifiable	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Transportation Accidents	$1,190	$1,281	$1,112	$1,096	$895	$884	$460	$550	$941	$999	$804	$864	$736	$894
Assaults and Violent Acts	1,108	1,120	784	791	849	786	502	611	909	954	770	797	818	962
Contact with Objects and Equipment	1,108	1,223	816	853	678	716	509	613	958	1,017	770	807	710	869
Falls	918	977	633	663	545	619	496	587	861	916	690	762	717	894
Exposure to Harmful Substances and Environments	1,287	1,371	1,015	1,057	744	729	625	678	1,023	1,058	811	813	911	1,009
Fires and Explosions	1,234	1,358	888	1,003	1,054	1,166	440	481	997	1,048	784	822	522	510
Bodily Reaction and Exertion	1,058	1,182	667	669	692	642	--	--	768	892	734	807	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 36. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Source of Injury[2] and Occupation Division, U.S., 1992–2002

Source of Injury	Occupation Division													
	Management and Professional Speciality		Technical, Sales and Administrative Support		Service		Farming, Forestry and Fishing		Precision Production, Craft and Repair		Operators, Fabricators and Laborers		Nonclassifiable	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Chemical and Chemical Products	224	$302,355	141	$139,013	149	$105,700	120	$79,718	416	$418,490	495	$406,605	23	$21,119
Containers	56	70,079	57	44,651	36	26,449	121	51,500	197	187,844	428	317,998	5	3,974
Furniture and Fixtures	20	17,910	28	19,518	15	7,375	--	--	85	81,237	44	29,770	--	--
Machinery	243	266,615	87	80,243	85	53,660	1,375	652,605	1,226	1,194,599	2,268	1,755,916	28	17,600
Parts and Materials	284	355,359	174	162,151	140	97,106	373	231,272	1,976	2,018,052	1,474	1,152,996	19	15,607
Persons, Plants, Animals and Minerals	270	273,707	155	106,062	164	113,657	1,731	939,992	303	290,431	646	462,880	22	15,683
Structures and Surfaces	681	654,334	370	247,504	536	306,028	672	332,163	3,443	3,023,313	2,364	1,666,546	61	44,482
Tools, instruments, and Equipment	233	241,543	301	208,324	190	134,663	133	84,165	268	237,706	279	213,890	10	9,594
Vehicles	3,198	3,805,186	3,535	3,910,464	1,766	1,573,880	4,309	1,955,729	2,767	2,587,591	11,831	9,550,376	179	131,173
Other Sources	1,848	2,083,173	2,934	2,355,679	2,182	1,963,303	768	429,802	1,116	1,048,035	2,142	1,677,177	94	75,217
Nonclassifiable	69	60,257	83	52,756	49	31,345	--	--	79	69,161	88	62,451	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 37. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Occupation Division, U.S., 1992–2002

Source of Injury	Occupation Division													
	Management and Professional Speciality		Technical, Sales and Administrative Support		Service		Farming, Forestry and Fishing		Precision Production, Craft and Repair		Operators, Fabricators and Laborers		Nonclassifiable	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Chemical and Chemical Products	$1,350	$1,416	$993	$1,061	$709	$736	$664	$702	$1,006	$1,028	$821	$831	$918	$998
Containers	1,251	1,438	783	800	735	745	426	460	954	1,013	743	812	795	1,013
Furniture and Fixtures	895	965	697	785	492	549	--	--	956	1,072	677	727	--	--
Machinery	1,097	1,169	922	1,009	631	683	475	558	976	1,044	775	812	629	788
Parts and Materials	1,251	1,339	932	1,026	694	720	620	682	1,022	1,062	782	807	821	905
Persons, Plants, Animals and Minerals	1,014	1,136	684	744	693	718	543	641	959	1,019	717	767	713	734
Structures and Surfaces	962	1,070	671	703	572	641	494	583	878	930	705	771	729	916
Tools, Instruments, and Equipment	1,037	1,055	692	727	709	708	633	688	890	935	767	806	959	1,048
Vehicles	1,190	1,282	1,107	1,094	892	879	454	541	936	997	807	870	733	898
Other Sources	1,127	1,145	803	807	900	811	560	654	940	986	783	805	800	941
Nonclassifiable	873	869	636	688	640	717	--	--	875	948	709	748	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 38. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Industry Division and Occupation Division, U.S., 1992–2002

Industry Division	Occupation Division													
	Management and Professional Speciality		Technical, Sales and Administrative Support		Service		Farming, Forestry and Fishing		Precision Production, Craft and Repair		Operators, Fabricators and Laborers		Nonclassifiable	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Agriculture, Forestry, and Fishing	119	$148,977	186	$266,853	48	$37,228	7,935	$3,780,038	61	$53,099	358	$268,255	19	$1,653
Mining	85	108,805	36	40,883	13	8,212	--	--	952	1,087,734	629	537,283	--	--
Construction	770	899,636	141	140,272	26	16,416	38	23,872	6,140	5,583,706	4,931	3,733,506	29	24,957
Manufacturing	729	892,990	540	516,217	132	74,343	1,175	705,793	1,493	1,393,336	3,599	2,755,033	37	24,618
Transportation, Communications, and Public Utilities	409	513,941	1,133	1,497,938	147	96,596	31	18,627	1,022	1,090,580	7,869	6,552,294	17	13,882
Wholesale Trade	220	239,327	685	590,119	32	18,204	56	30,917	265	245,791	1,365	1,036,768	15	9,049
Retail Trade	918	893,611	3,344	2,495,455	777	503,083	17	8,079	330	275,783	1,262	904,626	41	30,785
Finance, Insurance, and Real Estate	394	393,766	414	379,611	129	71,534	46	21,423	61	50,856	46	29,879	7	4,391
Services	2,871	3,331,854	1,055	1,030,338	1,869	1,161,795	240	138,613	1,310	1,164,938	1,552	1,157,896	67	51,994
Public Administration	564	655,561	292	326,936	2,125	2,419,462	65	32,478	210	181,161	321	227,185	15	12,834
Nonclassifiable	47	52,051	39	41,745	14	6,294	--	--	32	29,474	127	93,849	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 39. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Industry Division and Occupation Division, U.S., 1992–2002

Industry Division	Occupation Division													
	Management and Professional Speciality		Technical, Sales and Administrative Support		Service		Farming, Forestry and Fishing		Precision Production, Craft and Repair		Operators, Fabricators and Laborers		Nonclassifiable	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Agriculture, Forestry, and Fishing	$1,252	$1,387	$1,435	$1,605	$776	$734	$476	$574	$870	$964	$749	$805	$870	$1,003
Mining	1,280	1,489	1,136	1,144	632	729	--	--	1,143	1,218	854	919	--	--
Construction	1,168	1,342	995	1,022	631	676	628	693	909	954	757	801	861	1,028
Manufacturing	1,227	1,372	961	962	568	659	601	676	938	1,016	766	811	665	805
Transportation, Communications, and Public Utilities	1,257	1,379	1,322	1,329	657	690	601	656	1,067	1,117	833	892	817	1,032
Wholesale Trade	1,088	1,230	861	918	569	653	552	638	928	1,013	760	819	603	923
Retail Trade	973	1,001	746	757	647	691	475	582	836	885	717	766	751	892
Finance, Insurance, and Real Estate	999	1,112	917	981	555	665	466	571	834	967	650	755	627	681
Services	1,161	1,246	977	990	622	711	578	671	889	973	746	800	776	941
Public Administration	1,162	1,236	1,120	1,095	1,139	1,225	500	565	863	928	708	751	856	903
Nonclassifiable	1,107	1,135	1,070	1,096	484	470	--	--	921	1,004	739	833	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 40. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Industries[2], U.S., 1992–2002

Selected Industries	Number of Deaths	Costs		
		Total	Mean	Median
Trucking, Except Local	3,267	$2,734,185	$837	$932
General Farms, Primarily Crop	2,180	847,430	389	318
Logging	1,436	924,398	644	699
Grocery Stores	1,421	1,054,230	742	709
Police Protection	1,370	1,630,567	1,190	1,266
Local Trucking, Without Storage	1,354	1,112,307	821	905
Highway and Street Construction	1,281	1,021,717	798	831
Eating Places	1,046	825,789	789	797
Roofing, Siding, and Sheet Metal Work	1,028	852,246	829	838
Electrical Work	958	968,695	1,011	1,088

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected industries had the highest total of fatal occupational injuries.

Table 41. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Industries[2] and Year, U.S., 1992–2002

Selected Industries		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Trucking, Except Local	No.	174	211	280	276	282	329	328	361	345	329	352
	Total Cost	$136,422	172,272	231,204	223,972	225,724	258,965	265,938	312,733	305,872	299,493	301,592
	Mean Cost	$784	816	826	811	800	787	811	866	887	910	857
	Median Cost	$875	920	917	908	923	888	914	965	999	1,033	966
General Farms, Primarily Crop	No.	199	175	238	199	183	215	232	212	173	166	188
	Total Cost	$67,495	67,057	72,174	72,667	67,841	84,495	99,029	84,004	81,028	67,535	84,105
	Mean Cost	$339	383	303	365	371	393	427	396	468	407	447
	Median Cost	$333	438	206	321	239	317	388	284	386	273	338
Logging	No.	159	141	130	139	154	136	124	135	121	98	99
	Total Cost	$102,670	99,261	89,504	100,184	99,831	84,911	71,192	80,962	69,549	61,716	64,618
	Mean Cost	$646	704	688	721	648	624	574	600	575	630	653
	Median Cost	$694	790	778	809	670	693	629	669	656	690	703
Grocery Stores	No.	132	153	178	149	147	162	109	93	113	100	85
	Total Cost	$92,964	115,866	127,102	111,814	98,092	120,535	88,681	66,468	87,201	74,247	71,262
	Mean Cost	$704	757	714	750	667	744	814	715	772	742	838
	Median Cost	$687	700	693	725	654	719	807	701	727	714	840
Police Protection	No.	121	115	130	140	93	140	123	110	128	147	123
	Total Cost	$135,501	138,432	151,161	160,069	98,684	158,643	142,962	128,303	165,594	187,713	163,506
	Mean Cost	$1,120	1,204	1,163	1,143	1,061	1,133	1,162	1,166	1,294	1,277	1,329
	Median Cost	$1,206	1,263	1,238	1,240	1,160	1,194	1,258	1,239	1,358	1,352	1,408
Local Trucking, Without Storage	No.	109	109	109	110	112	129	148	142	130	111	145
	Total Cost	$87,143	88,634	88,651	88,585	86,401	102,701	119,353	119,596	116,351	96,123	118,771
	Mean Cost	$799	813	813	805	771	796	806	842	895	866	819
	Median Cost	$863	882	898	890	869	911	933	940	1,004	960	908
Highway and Street Construction	No.	127	104	115	119	127	107	134	111	106	128	103
	Total Cost	$99,840	89,470	92,043	98,879	97,700	87,547	98,700	85,555	84,349	105,075	82,559
	Mean Cost	$786	860	800	831	769	818	737	771	796	821	802
	Median Cost	$837	894	807	823	803	832	767	831	868	844	841

See footnote at end of table.

Table 41. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Industries[2] and Year, U.S., 1992–2002— Continued

Selected Industries		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Eating Places	No.	105	105	112	92	88	102	67	88	99	97	91
	Total Cost	$84,202	77,095	85,153	64,853	67,942	79,703	57,866	64,613	77,553	83,814	82,996
	Mean Cost	$802	734	760	705	772	781	864	734	783	864	912
	Median Cost	$812	734	775	676	794	775	865	760	801	876	879
Roofing, Siding and Sheet Metal Work	No.	78	82	87	94	96	102	89	91	95	106	108
	Total Cost	$66,019	66,318	71,704	77,238	71,595	82,780	69,931	74,332	81,213	93,297	97,818
	Mean Cost	$846	809	824	822	746	812	786	817	855	880	906
	Median Cost	$887	812	809	832	790	828	812	856	877	891	885
Electrical Work	No.	72	69	78	90	69	81	115	107	80	91	106
	Total Cost	$74,295	70,963	78,048	86,009	69,952	78,474	109,435	101,532	82,815	103,784	113,390
	Mean Cost	$1,032	1,028	1,001	956	1,014	969	952	949	1,035	1,140	1,070
	Median Cost	$1,104	1,116	1,116	1,016	1,095	1,049	1,033	1,037	1,101	1,205	1,158

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected industries had the highest total of fatal occupational injuries.

Table 42. Number and Lifetime Costs[1] of Fatal Occupational Injuries for Selected Industries[2] by Sex, U.S., 1992–2002

Selected Industries	Sex							
	Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Trucking, Except Local	3,142	$2,633,706	$933	$838	125	$100,479	$823	$804
General Farms, Primarily Crop	2,123	823,369	313	388	57	24,061	422	422
Logging	1,426	916,623	698	643	10	7,775	781	778
Grocery Stores	1,140	860,239	755	692	281	193,991	690	743
Police Protection	1,279	1,527,791	1,268	1,195	91	102,776	1,221	1,129
Local Trucking, Without Storage	1,333	1,094,715	906	821	21	17,593	857	838
Highway and Street Construction	1,220	971,955	831	797	61	49,762	842	816
Eating Places	--	--	--	--	--	--	--	--
Roofing, Siding, and Sheet Metal Work	--	--	--	--	--	--	--	--
Electrical Work	947	958,154	1,090	1,012	11	10,541	948	958

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected industries had the highest total of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 43. Number and Lifetime Costs[1] of Fatal Occupational Injuries for Selected Industries[2] by Race, U.S., 1992–2002

Selected Industries	Race											
	White				Black				Other[3]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Trucking, Except Local	2,703	$2,240,245	$829	$927	441	$107,946	$875	$953	123	$385,995	$878	$990
General Farms, Primarily Crop	2,077	796,325	383	293	58	24,967	451	516	45	26,138	555	631
Logging	1,162	761,751	656	704	230	28,130	585	645	44	134,517	639	701
Grocery Stores	873	619,727	710	692	158	115,889	733	705	390	318,614	817	750
Police Protection	1,155	1,383,566	1,198	1,265	161	54,945	1,193	1,289	54	192,055	1,018	1,225
Local Trucking, Without Storage	1,131	936,232	828	913	165	49,911	765	810	58	126,164	861	942
Highway and Street Construction	1,087	866,372	797	829	132	52,167	782	834	62	103,178	841	854
Eating Places	718	563,483	785	805	155	139,062	795	786	173	123,245	804	784
Roofing, Siding, and Sheet Metal Work	857	716,156	836	843	88	69,949	752	795	83	66,141	843	854
Electrical Work	864	879,084	1,017	1,096	53	38,030	973	1,006	41	51,581	928	1,040

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected industries had the highest total of fatal occupational injuries.
[3]This category includes cases where the race of the decedent was not known.

Table 44. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Industries[2] and Age Group, U.S., 1992–2002

Selected Industries	Age Group															
	16-17				18-19				20-24				25-34			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Trucking, Except Local	6	$4,475	$746	$762	--	--	--	--	--	--	--	--	579	$610,973	$1,055	$1,034
General Farms, Primarily Crop	--	--	--	--	--	--	--	--	57	37,808	663	635	150	120,435	803	724
Logging	--	--	--	--	--	--	--	--	97	71,006	732	706	282	230,209	816	790
Grocery Stores	12	6,834	569	544	35	22,636	647	656	95	70,739	745	671	325	295,838	910	816
Police Protection	--	--	--	--	--	--	--	--	--	--	--	--	525	686,896	1,308	1,314
Local Trucking, Without Storage	--	--	--	--	--	--	--	--	82	74,087	903	905	286	294,560	1,030	1,033
Highway and Street construction	--	--	--	--	--	--	--	--	91	75,857	834	797	255	248,468	974	939
Eating Places	44	27,196	618	594	72	52,560	730	732	156	125,546	805	803	262	248,680	949	973
Roofing, Siding, and Sheet Metal Work	11	6,984	635	627	28	20,138	719	728	135	110,790	821	806	287	269,388	939	893
Electrical work	6	4,372	729	634	23	18,991	826	845	93	90,445	973	991	261	300,130	1,150	1,171

See footnotes at end of table.

Table 44. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Industries[2] and Age Group, U.S., 1992–2002— Continued

Selected Industries	Age Group															
	35-44				45-54				55-64				65+			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Trucking, Except Local	928	$972,574	$1,048	$1,037	902	$752,557	$834	$839	584	$268,791	$460	$477	151	$14,078	$93	$65
General Farms, Primarily Crop	281	237,051	844	854	325	223,267	687	658	439	154,297	351	338	892	54,163	61	55
Logging	356	293,062	823	789	310	208,282	672	632	249	90,618	364	358	105	7,131	68	51
Grocery Stores	338	320,118	947	942	312	244,092	782	806	207	86,741	419	395	97	7,233	75	65
Police Protection	391	518,870	1,327	1,330	255	278,757	1,093	1,094	81	47,891	591	606	38	3,029	80	61
Local Trucking, Without Storage	352	358,946	1,020	1,023	322	267,681	831	837	201	93,651	466	473	89	7,571	85	64
Highway and Street Construction	341	338,280	992	960	298	238,270	800	759	213	96,260	452	444	55	4,881	89	72
Eating Places	224	209,391	935	975	162	123,471	762	777	83	35,864	432	407	43	3,081	72	60
Roofing, Siding, and Sheet Metal Work	292	280,406	960	888	168	126,831	755	731	77	35,192	457	452	30	2,517	84	60
Electrical Work	292	344,798	1,181	1,192	165	160,377	972	989	95	47,375	499	514	23	2,209	96	67

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected industries had the highest total of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 45. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Event or Exposure[2] and Selected Industries[3], U.S., 1992–2002

Event or Exposure	Selected Industries																			
	Trucking, Except Local		General Farms, Primarily Crop		Logging		Grocery Stores		Police Protection		Local Trucking, Without Storage		Highway and Street Construction		Eating Places		Roofing, Siding, and Sheet Metal		Electrical Work	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Transportation Accidents	2,753	$2,310,546	1,250	$449,992	383	$274,275	79	$64,625	660	$772,110	1,032	$851,779	943	$749,445	189	$152,809	107	$89,235	188	$190,605
Assaults and Violent Acts	136	127,580	104	42,945	18	12,459	1,256	937,739	637	774,415	34	34,332	23	20,221	731	590,771	11	11,181	26	25,555
Contact with Objects and Equipment	181	141,791	592	244,918	962	588,182	25	15,932	19	22,284	193	147,466	176	141,946	15	10,278	39	33,406	68	64,904
Falls	88	57,203	81	24,808	31	18,890	37	16,828	21	22,800	36	24,787	49	31,957	54	32,258	695	557,798	184	174,894
Exposure to Harmful Substances and Environments	75	70,179	103	63,018	28	20,658	10	8,010	22	27,004	42	37,507	70	61,662	42	28,940	171	156,453	457	477,963
Fires and Explosions	23	17,958	43	18,267	9	6,487	10	8,324	6	7,009	13	13,169	19	15,530	12	8,586	5	4,173	32	32,089
Bodily Reaction and Exertion	7	5,059	--	--	--	--	--	--	5	4,944	--	--	--	--	--	--	--	--	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	5	2,248	5	3,448	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]Selected industries had the highest total of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 46. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Selected Industries[3], U.S., 1992–2002

Event or Exposure	Selected Industries																			
	Trucking, Except Local		General Farms, Primarily Crop		Logging		Grocery Stores		Police Protection		Local Trucking, Without Storage		Highway and Street Construction		Eating Places		Roofing, Siding, and Sheet Metal		Electrical Work	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Transportation Accidents	$839	$933	$360	$261	$716	$753	$818	$864	$1,170	$1,258	$825	$916	$795	$829	$809	$852	$834	$816	$1,014	$1,061
Assaults and Violent Acts	938	1,002	413	283	692	702	747	707	1,216	1,271	1,010	986	879	974	808	798	1,016	888	983	1,038
Contact with Objects and Equipment	783	868	414	376	611	683	637	602	1,173	1,298	764	827	807	844	685	703	857	796	954	1,019
Falls	650	602	306	105	609	685	455	495	1,086	1,165	689	667	652	669	597	663	803	828	951	1,016
Exposure to Harmful Substances and Environments	936	981	612	663	738	706	801	721	1,227	1,249	893	913	881	859	689	675	915	871	1,046	1,129
Fires and Explosions	781	872	425	303	721	687	832	779	1,168	1,332	1,013	1,037	817	823	716	736	835	839	1,003	1,123
Bodily Reaction and Exertion	723	775	--	--	--	--	--	--	989	1,158	--	--	--	--	--	--	--	--	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	450	531	690	697	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]Selected industries had the highest total of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 47. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Source of Injury[2] and Selected Industries[3], U.S., 1992–2002

Source of Injury	Selected Industries																			
	Trucking, Except Local		General Farms, Primarily Crop		Logging		Grocery Stores		Police Protection		Local Trucking, Without Storage		Highway and Street Construction		Eating Places		Roofing, Siding, and Sheet Metal		Electrical Work	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Chemical and Chemical Products	53	$52,533	20	$14,545	7	$6,550	--	--	6	$7,005	11	$10,620	7	$7,251	15	$10,458	6	$5,773	6	$6,491
Containers	26	19,478	37	16,405	--	--	8	3,765	--	--	13	6,616	7	5,343	--	--	6	4,320	--	--
Furniture and Fixtures	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23	23,029
Machinery	23	16,879	394	168,397	182	121,862	11	5,395	--	--	46	32,826	294	232,646	8	5,665	17	14,164	59	58,523
Parts and Materials	72	60,281	51	28,192	22	14,443	17	12,463	--	--	53	46,125	55	47,983	20	16,604	82	77,562	388	407,908
Persons, Plants, Animals and Minerals	21	14,882	167	70,045	879	534,873	23	13,798	11	13,356	27	22,396	26	21,050	27	18,617	7	6,940	6	4,232
Structures and Surfaces	94	64,070	87	27,872	23	13,677	39	19,483	21	22,800	39	26,377	65	44,374	55	33,572	696	561,041	208	197,374
Tools, Instruments, and Equipment	14	11,882	11	4,544	13	7,747	76	49,944	8	8,911	--	--	6	4,620	95	76,482	52	46,384	20	18,769
Vehicles	2,831	2,376,052	1,278	455,671	277	201,992	89	73,309	677	793,445	1,119	924,587	776	621,100	195	157,890	119	98,783	189	192,627
Other Sources	123	111,198	130	60,046	27	19,027	1,137	863,437	634	773,315	44	40,987	44	36,394	602	484,020	38	32,503	53	52,796
Nonclassifiable	--	--	--	--	6	4,227	13	7,885	--	--	--	--	--	--	22	17,240	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]Selected industries had the highest total of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 48. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Selected Industries[3], U.S., 1992–2002

Source of Injury	Selected Industries																			
	Trucking, Except Local		General Farms, Primarily Crop		Logging		Grocery Stores		Police Protection		Local Trucking, Without Storage		Highway and Street Construction		Eating Places		Roofing, Siding, and Sheet Metal		Electrical Work	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Chemical and Chemical Products	$991	$999	$727	$805	$936	$814	--	--	$1,168	$1,201	$965	$1,001	$1,036	$1,147	$697	$702	$962	$972	$1,082	$1,138
Containers	749	813	443	523	--	--	471	466	--	--	509	477	763	793	--	--	720	852	--	--
Furniture and Fixtures	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,001	1,091
Machinery	734	767	427	416	670	730	490	256	--	--	714	772	791	836	708	682	833	832	992	1,056
Parts and Materials	837	952	553	630	657	694	733	679	--	--	870	967	872	843	830	747	946	887	1,051	1,128
Persons, Plants, Animals and Minerals	709	775	419	380	609	677	600	630	1,214	1,184	829	889	810	850	690	747	991	838	705	771
Structures and Surfaces	682	667	320	110	595	685	500	567	1,086	1,165	676	668	683	760	610	690	806	829	949	1,009
Tools, Instruments, and Equipment	849	1,002	413	362	596	718	657	676	1,114	1,205	--	--	770	771	805	806	892	854	938	1,076
Vehicles	839	933	357	241	729	766	824	864	1,172	1,259	826	914	800	830	810	860	830	816	1,019	1,082
Other Sources	904	988	462	498	705	702	759	714	1,220	1,274	932	912	827	818	804	793	855	819	996	1,082
Nonclassifiable	--	--	--	--	705	707	607	584	--	--	--	--	--	--	784	828	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]Selected industries had the highest total number of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 49. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Occupations[2], U.S., 1992–2002

Selected Occupations	Number of Deaths	Costs		
		Total	Mean	Median
Truck Drivers	8,820	$7,275,244	$825	$931
Construction Laborers	3,140	2,258,322	719	781
Farmers, Except Horticultural	3,061	1,172,424	383	245
Managers and Administrators, n.e.c.	2,308	2,713,650	1,176	1,359
Sales Occupations Supervisors	2,169	1,794,067	827	976
Laborers, Not Construction	2,086	1,418,308	680	743
Farm Workers	2,038	998,822	490	587
Airplane Pilots and Navigators	1,163	1,835,914	1,579	1,723
Logging Occupations	1,134	693,342	611	690
Groundskeepers	1,113	665,755	598	679

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected occupations had the highest total number of fatal occupational injuries.

Table 50. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Occupations[2] and Year, U.S., 1992–2002

Selected Occupations		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Truck Drivers	No.	693	734	763	757	793	858	880	896	845	795	806
	Total Cost	$538,454	595,930	622,649	618,625	629,535	677,599	713,400	742,351	743,180	717,362	676,159
	Mean Cost	$777	812	816	817	794	790	811	829	880	902	840
	Median Cost	$889	923	914	908	907	911	933	940	999	1,020	962
Construction Laborers	No.	219	230	236	302	282	325	326	327	275	334	284
	Total Cost	$154,848	175,578	162,860	219,577	200,645	236,927	219,575	233,413	203,989	244,234	206,677
	Mean Cost	$707	763	690	727	712	729	674	714	742	731	728
	Median Cost	$791	838	737	773	766	784	739	785	812	799	801
Farmers, Except Horticultural	No.	255	327	261	243	305	296	280	233	251	304	306
	Total Cost	$80,218	104,798	75,497	91,518	124,707	113,649	112,464	96,058	105,451	128,029	140,035
	Mean Cost	$315	320	289	377	409	384	402	412	420	421	458
	Median Cost	$242	210	181	225	326	272	245	301	224	220	283
Managers and Administrators, n.e.c.	No.	201	208	245	242	224	201	214	194	224	202	153
	Total Cost	$250,414	251,437	299,984	287,478	242,990	221,705	247,243	220,052	265,511	233,545	193,291
	Mean Cost	$1,246	1,209	1,224	1,188	1,085	1,103	1,155	1,134	1,185	1,156	1,263
	Median Cost	$1,463	1,435	1,375	1,446	1,273	1,303	1,350	1,336	1,270	1,327	1,398
Sales Occupations Supervisors	No.	225	225	232	200	219	221	180	139	180	188	160
	Total Cost	$185,313	190,838	191,513	161,767	176,500	184,392	152,237	111,731	145,023	150,297	144,456
	Mean Cost	$824	848	825	809	806	834	846	804	806	799	903
	Median Cost	$974	1,009	959	970	972	990	997	941	912	901	1,029
Laborers, Not Construction	No.	170	180	225	207	209	208	191	189	170	161	176
	Total Cost	$113,518	118,979	148,589	133,346	140,256	138,886	134,308	129,291	118,964	111,314	130,855
	Mean Cost	$668	661	660	644	671	668	703	684	700	691	743
	Median Cost	$722	746	727	716	736	725	760	739	774	771	825
Farm Workers	No.	193	176	240	229	146	185	200	184	146	163	173
	Total Cost	$91,326	83,675	103,388	98,802	64,840	88,165	103,691	91,916	80,183	91,084	101,752
	Mean Cost	$473	475	431	431	435	477	518	500	549	559	588
	Median Cost	$565	574	540	547	543	580	588	602	634	645	698

See footnote at end of table.

Table 50. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Occupations[2] and Year, U.S., 1992–2002— Continued

Selected Occupations		Year of Death										
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Airplane Pilots and Navigators	No.	119	105	132	115	102	100	91	94	130	85	90
	Total Cost	$178,172	180,100	211,657	164,629	157,310	145,923	163,005	132,061	227,942	137,648	137,467
	Mean Cost	$1,497	1,715	1,603	1,432	1,542	1,459	1,791	1,405	1,753	1,619	1,527
	Median Cost	$1,629	1,891	1,701	1,612	1,738	1,653	1,999	1,632	1,994	1,866	1,765
Logging Occupations	No.	131	124	112	98	119	110	90	101	95	82	72
	Total Cost	$80,098	83,017	77,923	70,054	71,030	69,410	45,920	58,439	47,692	46,676	43,084
	Mean Cost	$611	669	696	715	597	631	510	579	502	569	598
	Median Cost	$694	785	778	809	662	741	602	658	609	665	674
Groundskeepers	No.	68	87	79	78	91	103	107	105	130	119	146
	Total Cost	$41,924	49,830	44,596	42,743	51,950	56,153	60,267	57,017	83,216	77,163	100,897
	Mean Cost	$617	573	565	548	571	545	563	543	640	648	691
	Median Cost	$686	667	669	638	658	665	661	649	739	735	776

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected occupations had the highest total number of fatal occupational injuries.

Table 51. Number and Lifetime Costs[1] of Fatal Occupational Injuries for Selected Occupations[2] by Sex, U.S., 1992–2002

Selected Occupations	Sex							
	Male				Female			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Truck Drivers	8,567	$7,070,917	$825	$932	253	$204,326	$808	$856
Construction Laborers	3,066	2,202,549	718	780	74	55,773	754	826
Farmers, Except Horticultural	2,971	1,138,976	383	242	90	33,448	372	349
Managers and Administrators, n.e.c.	2,140	2,539,211	1,187	1,396	168	174,439	1,038	1,172
Sales Occupations Supervisors	1,890	1,581,229	837	996	279	212,838	763	867
Laborers, Not Construction	2,005	1,357,155	677	741	81	61,152	755	814
Farm Workers	1,957	951,327	486	582	81	47,495	586	688
Airplane Pilots and Navigators	1,141	1,807,630	1,584	1,734	22	28,285	1,286	1,355
Logging Occupations	1,129	690,600	612	690	5	2,742	548	521
Groundskeepers	1,093	651,152	596	678	20	14,604	730	768

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected occupations had the highest total number of fatal occupational injuries.

Table 52. Number and Lifetime Costs[1] of Fatal Occupational Injuries for Selected Occupations[2] by Race, U.S., 1992–2002

Selected Occupations	Race											
	White				Black				Other[3]			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Truck Drivers	7,375	$6,040,805	$819	$926	1,102	$934,348	$848	$948	343	$300,090	$875	$965
Construction Laborers	2,499	1,800,136	720	784	364	255,579	702	773	277	202,607	731	777
Farmers, Except Horticultural	2,998	1,143,326	381	242	35	15,802	451	430	28	13,296	475	497
Managers and Administrators, n.e.c.	2,091	2,454,331	1,174	1,361	109	132,328	1,214	1,372	108	126,991	1,176	1,308
Sales Occupations Supervisors	1,616	1,298,641	804	956	150	118,319	789	979	403	377,107	936	1,032
Laborers, Not Construction	1,559	1,056,837	678	742	374	252,588	675	742	153	108,883	712	753
Farm Workers	1,729	827,417	479	578	111	53,584	483	587	198	117,821	595	653
Airplane Pilots and Navigators	1,106	1,733,909	1,568	1,706	9	17,603	1,956	1,957	48	84,402	1,758	1,838
Logging Occupations	918	568,515	619	695	165	93,676	568	658	51	31,151	611	691
Groundskeepers	910	551,687	606	681	124	67,717	546	649	79	46,351	587	693

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected occupations had the highest total number of fatal occupational injuries.
[3]This category includes cases where the race of the decendent was not known.

Table 53. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Occupations[2] and Age Group, U.S., 1992–2002

Selected Occupations	Age Group															
	16-17				18-19				20-24				25-34			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Truck Drivers	9	$6,918	$769	$776	73	$58,739	$805	$784	446	$414,167	$929	$914	1,775	$1,839,873	$1,037	$1,018
Construction Laborers	58	36,362	627	625	147	99,889	680	675	422	318,372	754	755	843	702,258	833	835
Farmers, Except Horticultural	5	2,812	562	544	7	5,119	731	710	227	144,747	638	631	383	267,187	698	683
Managers and Administrators, n.e.c.	--	--	--	--	--	--	--	--	--	--	--	--	306	501,012	1,637	1,658
Sales Occupations Supervisors	--	--	--	--	7	6,609	944	930	--	--	--	--	329	385,430	1,172	1,171
Laborers, Not Construction	--	--	--	--	105	70,016	667	655	277	203,299	734	724	468	379,232	810	806
Farm Workers	73	39,185	537	524	85	48,710	573	563	227	144,747	638	631	383	267,187	698	683
Airplane Pilots and Navigators	--	--	--	--	--	--	--	--	46	79,854	1,736	1,753	304	568,661	1,871	1,847
Logging Occupations	--	--	--	--	--	--	--	--	89	62,970	708	703	243	188,817	777	774
Groundskeepers	18	10,269	570	553	35	22,016	629	605	141	96,939	688	677	276	204,937	743	724

See footnotes at end of table.

Table 53. Number and Lifetime Costs[1] of Fatal Occupational Injuries by Selected Occupations[2] and Age Group, U.S., 1992–2002— Continued

Selected Occupations	Age Group															
	35-44				45-54				55-64				65+			
	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost	No.	Total Cost	Mean Cost	Median Cost
Truck Drivers	2,416	2,484,748	1,028	1,017	2,176	1,788,245	822	830	1,412	639,937	454	469	513	42,615	83	62
Construction Laborers	822	674,895	821	825	501	330,594	660	670	242	88,955	368	398	105	6.998	67	53
Farmers, Except Horticultural	351	238,653	680	675	305	164,039	538	541	270	77,776	288	293	344	18,525	54	45
Managers and Administrators, n.e.c.	614	993,712	1,618	1,642	609	790,220	1,298	1,322	469	325,271	694	720	257	29,070	113	88
Sales Occupations Supervisors	518	599,796	1,158	1,172	564	518,404	919	934	420	205,098	488	495	278	22,658	82	66
Laborers, Not Construction	513	413,593	806	802	383	248,675	649	657	196	71,180	363	372	--	--	--	--
Farm Workers	351	238,653	680	675	305	164,039	538	541	270	77,776	288	293	344	18,525	54	45
Airplane Pilots and Navigators	292	573,597	1,964	1,965	301	471,165	1,565	1,556	156	129,232	828	845	--	--	--	--
Logging Occupations	288	220,076	764	765	229	138,222	604	606	179	59,061	330	335	74	4,318	58	49
Groundskeepers	260	190,735	734	717	164	95,672	583	583	128	39,853	311	315	91	5,334	59	47

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Selected occupations had the highest total number of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 54. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Event or Exposure[2] and Selected Occupations[3], U.S., 1992–2002

Event or Exposure	Selected Occupations																			
	Truck Drivers		Construction Laborers		Farmers, Except Horticultural		Managers and Administrators, n.e.c.		Sales Occupations Supervisors		Laborers, Not Construction		Farm Workers		Airplane Pilots and Navigators		Logging Occupations		Groundskeepers	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Transportation Accidents	7,141	$5,931,218	958	$684,667	1,614	$568,272	915	$1,071,269	388	$336,762	616	$413,490	993	$466,883	1,155	$1,823,134	163	$94,189	340	$195,676
Assaults and Violent Acts	327	289,889	61	45,683	207	90,100	588	733,004	1,542	1,284,490	151	104,962	187	95,002	--	--	12	7,364	49	28,970
Contact with Objects and Equipment	763	605,468	819	592,766	851	333,669	288	320,521	93	71,861	635	440,459	454	224,822	--	--	877	536,848	264	161,149
Falls	250	156,154	805	561,378	170	63,474	282	282,292	66	35,930	280	174,753	109	44,445	--	--	45	28,401	238	137,662
Exposure to Harmful Substances and Environments	242	217,924	435	328,309	162	94,591	157	211,326	37	33,273	283	199,892	258	152,287	--	--	28	20,500	218	140,472
Fires and Explosions	68	54,142	52	38,530	50	18,685	69	84,898	38	27,609	116	81,088	31	13,103	--	--	7	4,785	--	--
Bodily Reaction and Exertion	20	14,616	8	5,679	--	--	5	5,571	--	--	--	--	--	--	--	--	--	--	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	5	2,397	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]Selected occupations had the highest total number of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 55. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Event or Exposure[2] and Selected Occupations[3], U.S., 1992–2002

Event or Exposure	Selected Occupations																			
	Truck Drivers		Construction Laborers		Farmers, Except Horticultural		Managers and Administrators, n.e.c.		Sales Occupations Supervisors		Laborers, Not Construction		Farm Workers		Airplane Pilots and Navigators		Logging Occupations		Groundskeepers	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Transportation Accidents	$830,703	$932,825	$715	$774	$352	$194	$1,171	$1,350	$868	$997	$671	$742	$470	$566	$1,578	$1,723	$578	$670	$576	$671
Assaults and Violent Acts	886,512	960,779	749	809	435	313	1,247	1,398	833	981	695	743	508	611	--	--	614	674	591	672
Contact with Objects and Equipment	793,536	890,947	724	785	392	283	1,113	1,301	773	907	694	746	495	592	--	--	612	688	610	679
Falls	624,616	626,041	697	770	373	273	1,001	1,147	544	487	624	723	408	506	--	--	631	703	578	677
Exposure to Harmful Substances and Environments	900,514	963,538	755	797	584	688	1,346	1,511	899	1,086	706	745	590	654	--	--	732	765	644	696
Fires and Explosions	796,201	949,180	741	796	374	115	1,230	1,434	727	868	699	767	423	527	--	--	684	702	--	--
Bodily Reaction and Exertion	730,801	817,281	710	775	--	--	1,114	1,244	--	--	--	--	--	--	--	--	--	--	--	--
Other Events or Exposures	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonclassifiable	--	--	--	--	479	622	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Event or Exposure codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]Selected occupations had the highest total number of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 56. Number and Lifetime Total Cost[1] of Fatal Occupational Injuries by Source of Injury[2] and Selected Occupations[3], U.S., 1992–2002

Source of Injury	Selected Occupation																			
	Truck Drivers		Construction Laborers		Farmers, Except Horticultural		Managers and Administrators, n.e.c.		Sales Occupations Supervisors		Laborers, Not Construction		Farm Workers		Airplane Pilots and Navigators		Logging Occupations		Groundskeepers	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Chemical and Chemical Products	93	$88,030	68	$50,818	40	$26,630	68	$87,848	36	$34,455	79	$55,964	28	$16,485	--	--	--	--	8	$5,044
Containers	84	60,075	45	32,743	54	20,012	29	36,669	--	--	61	41,482	36	17,114	--	--	--	--	--	--
Furniture and Fixtures	5	3,175	9	6,096	--	--	--	--	--	--	11	7,115	--	--	--	--	--	--	--	--
Machinery	168	136,099	376	272,230	511	208,747	155	172,816	33	26,654	349	242,028	340	170,821	--	--	114	72,494	144	75,315
Parts and Materials	240	197,954	337	248,821	75	45,079	141	177,172	61	53,353	199	141,861	91	51,731	--	--	21	14,744	88	58,276
Persons, Plants, Animals and Minerals	114	81,412	135	99,127	302	113,974	75	76,815	49	28,101	124	81,165	192	85,584	--	--	811	496,481	197	123,155
Structures and Surfaces	255	165,522	1,037	731,784	180	66,522	318	334,903	68	37,467	315	198,863	124	53,389	--	--	40	24,385	225	128,921
Tools, Instruments, and Equipment	30	25,008	64	49,040	14	6,741	59	69,876	123	82,693	32	21,682	23	12,857	--	--	12	7,750	50	32,911
Vehicles	7,472	6,208,870	875	623,620	1,708	599,296	931	1,091,185	415	355,705	632	427,860	965	455,668	1,157	1,824,693	105	56,155	287	173,146
Other Sources	335	293,717	188	140,041	169	82,844	510	639,060	1,329	1,139,979	275	193,927	233	132,285	--	--	23	15,433	106	64,801
Nonclassifiable	24	15,382	6	4,002	--	--	--	--	38	23,520	9	6,361	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]Selected occupations had the highest total number of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Table 57. Lifetime Mean and Median Costs[1] of Fatal Occupational Injuries by Source of Injury[2] and Selected Occupations[3], U.S., 1992–2002

Source of Injury	Selected Occupations																			
	Truck Drivers		Construction Laborers		Farmers, Except Horticultural		Managers and Administrators, n.e.c.		Sales Occupations Supervisors		Laborers, Not Construction		Farm Workers		Airplane Pilots and Navigators		Logging Occupations		Groundskeepers	
	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost	Mean Cost	Median Cost
Chemical and Chemical Products	$947	$989	$747	$811	$666	$721	$1,292	$1,466	$957	$1,090	$708	$744	$589	$656	--	--	--	--	$631	$702
Containers	715	815	728	793	371	228	1,264	1,502	689	647	680	772	475	602	--	--	--	--	--	--
Furniture and Fixtures	635	630	677	714	--	--	--	--	--	--	647	739	--	--	--		--	--	--	--
Machinery	810	922	724	779	409	333	1,115	1,314	--	--	693	751	502	593	--	--	636	718	523	655
Parts and Materials	825	926	738	787	601	700	1,257	1,413	875	1,042	713	765	568	646	--	--	702	703	662	692
Persons, Plants, Animals and Minerals	714	794	734	788	377	241	1,024	1,162	573	709	655	703	446	564	--	--	612	685	625	690
Structures and Surfaces	649	656	706	776	370	271	1,053	1,255	551	508	631	722	431	535	--	--	610	679	573	674
Tools, Instruments, and Equipment	834	915	766	810	481	479	1,184	1,286	672	707	678	731	559	588	--	--	646	737	658	705
Vehicles	831	933	713	773	351	183	1,172	1,351	857	997	677	740	472	570	708	744	535	619	603	681
Other sources	877	954	745	787	490	520	1,253	1,415	858	1,001	705	749	568	642	--	--	671	718	611	683
Nonclassifiable	641	765	667	709	--	--	--	--	619	741	707	726	--	--	--	--	--	--	--	--

[1]Costs are expressed in thousands of 2003 U.S. dollars.
[2]Source of Injury codes were assigned based on the BLS Occupational Injury and Illness Classification System.
[3]Selected occupations had the highest total number of fatal occupational injuries.
NOTE: Dashes indicate data that do not meet publication criteria.

Appendix I

Occupational Injury and Illness Classification System (OIICS) Rubrics for Event or Exposure and Source of Injury or Illness Code Structures

Bureau of Labor Statistics Occupational Injury and Illness Classification System (OIIS)

EVENT OR EXPOSURE CODE STRUCTURE

DEFINITION

The event or exposure describes the manner in which the injury or illness was produced or inflicted by the source of injury or illness.

RULES OF SELECTION:

4.1 When the injury or illness occurred as a result of contact with or exposure to an object or substance, select the event or exposure which best describes the manner in which that contact or exposure occurred.

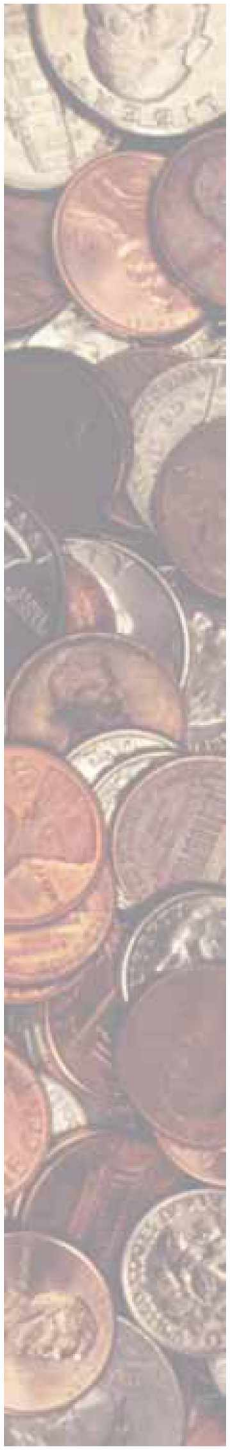
4.1.1 The following events take precedence over other events or exposures:

- Assaults and Violent Acts
- Transportation Accidents
- Fires
- Explosions

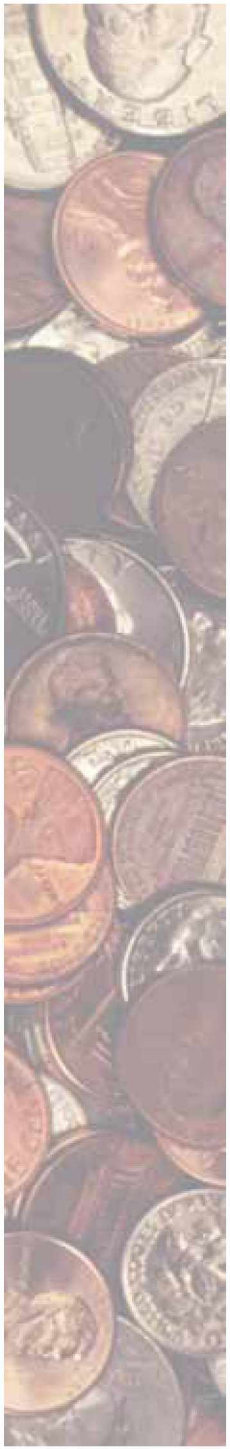
When two or more of these events occurred, select the first event listed above.

4.2 When the injury or illness occurred as a result of bodily motion or position, select bodily reaction, repetitive motion or sustained viewing as the event or exposure code.

Division Title	Event or Exposure Rubric
0* CONTACT WITH OBJECTS AND EQUIPMENT	
	00 Contact with objects and equipment, unspecified
	01* Struck against object or equipment
	010 Struck against object or equipment, unspecified
	011 Stepped on object
	012 Struck against stationary object or equipment



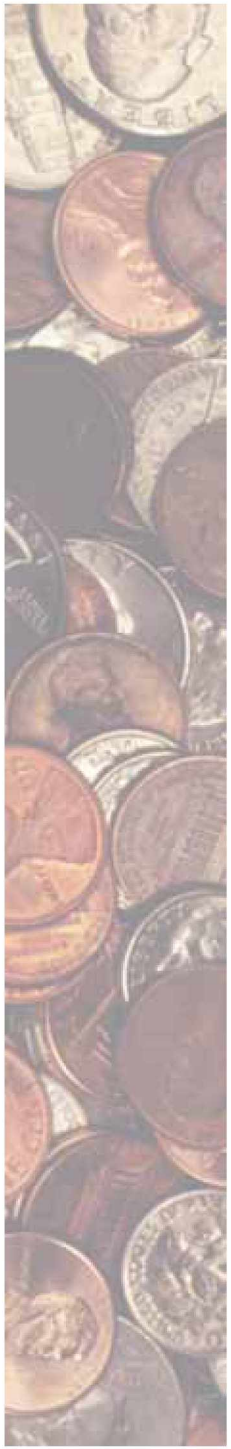
013 Struck against moving object or equipment
019 Struck against object or equipment, n.e.c.
02* Struck by object or equipment
020 Struck by object or equipment, unspecified
021 Struck by falling object or equipment
022* Struck by flying object
0220 Struck by flying object, unspecified
0221 Struck by dislodged flying object, particle
0222 Struck by discharged object or substance
0229 Struck by flying object, n.e.c.
023* Struck by swinging or slipping object
0230 Struck by swinging or slipping object, unspecified
0231 Struck by or slammed in swinging door or gate
0232 Struck by slipping handheld object
0239 Struck by swinging or slipping object, n.e.c.
024 Struck by rolling, sliding objects or equipment on floor or ground level
029 Struck by object or equipment, n.e.c.
03* Caught in or compressed by equipment or objects
030 Caught in or compressed by equipment or objects, unspecified
031 Caught in running equipment or machinery
032 Compressed or pinched by rolling, sliding, or shifting objects or equipment
039 Caught in or compressed by equipment or objects, n.e.c.
04* Caught in or crushed in collapsing materials
040 Caught in or crushed in collapsing materials, unspecified
041 Excavation or trenching cave-in
042 Other cave-in
043 Landslide
044 Caught in or crushed in collapsing structure
049 Caught in or crushed in collapsing materials, n.e.c.
05* Rubbed or abraded by friction or pressure
050 Rubbed or abraded by friction or pressure, unspecified
051 Rubbed or abraded by kneeling on surface
052 Rubbed or abraded by objects being handled
053 Rubbed or abraded by foreign matter in eye
059 Rubbed or abraded by friction or pressure, n.e.c.
06* Rubbed, abraded, or jarred by vibration
060 Rubbed, abraded, or jarred by vibration, unspecified



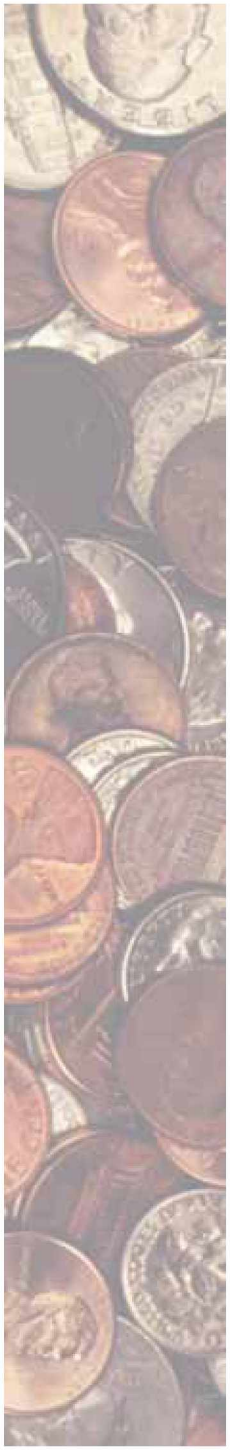
061 Rubbed, abraded, or jarred by vehicle or mobile equipment vibration
062 Rubbed, abraded, or jarred by other machine or equipment vibration
069 Rubbed, abraded, or jarred by vibration, n.e.c.
09 Contact with objects and equipment, n.e.c.

1* FALLS

10 Fall, unspecified
11* Fall to lower level
110 Fall to lower level, unspecified
111 Fall down stairs or steps
112* Fall from floor, dock, or ground level
1120 Fall from floor, dock, or ground level, unspecified
1121 Fall through existing floor opening
1122 Fall through floor surface
1123 Fall from loading dock
1124 Fall from ground level to lower level
1129 Fall from floor, dock, or ground level, n.e.c.
113 Fall from ladder
114 Fall from piled or stacked material
115* Fall from roof
1150 Fall from roof, unspecified
1151 Fall through existing roof opening
1152 Fall through roof surface
1153 Fall through skylight
1154 Fall from roof edge
1159 Fall from roof, n.e.c.
116 Fall from scaffold, staging
117 Fall from building girders or other structural steel
118 Fall from nonmoving vehicle
119 Fall to lower level, n.e.c.
12* Jump to lower level
120 Jump to lower level, unspecified
121 Jump from scaffold, platform, loading dock
122 Jump from structure, structural element, n.e.c.
123 Jump from nonmoving vehicle
129 Jump to lower level, n.e.c.
13* Fall on same level
130 Fall on same level, unspecified

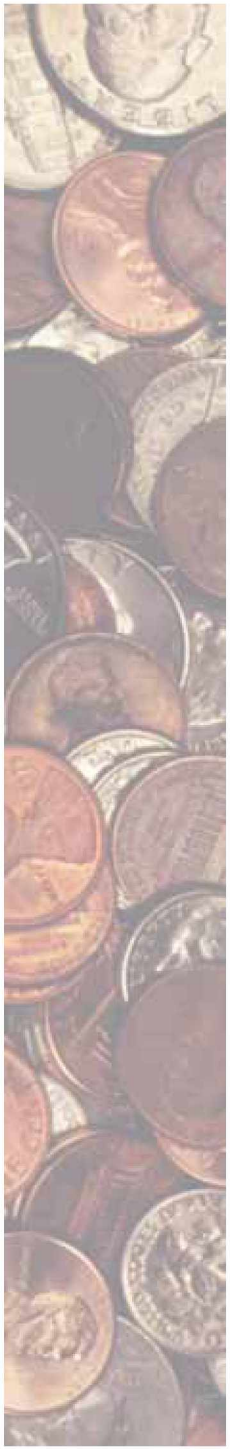


131 Fall to floor, walkway, or other surface
132 Fall onto or against objects
139 Fall on same level, n.e.c.
19 Fall, n.e.c.
2* BODILY REACTION AND EXERTION
20 Bodily reaction and exertion, unspecified
21* Bodily reaction
210 Bodily reaction, unspecified
211 Bending, climbing, crawling, reaching, twisting
212 Sudden reaction when surprised, frightened, startled
213 Running--without other incident
214 Sitting
215 Slip, trip, loss of balance--without fall
216 Standing
217 Walking--without other incident
219 Bodily reaction, n.e.c.
22* Overexertion
220 Overexertion, unspecified
221 Overexertion in lifting
222 Overexertion in pulling or pushing objects
223 Overexertion in holding, carrying, turning, or wielding objects
224 Overexertion in throwing objects
229 Overexertion, n.e.c.
23* Repetitive motion
230 Repetitive motion, unspecified
231 Typing or keyentry
232 Repetitive use of tools
233 Repetitive placing, grasping, or moving objects, except tools
239 Repetitive motion, n.e.c.
24 Sustained viewing
25 Bodily conditions, n.e.c.
29 Bodily reaction and exertion, n.e.c.
3* EXPOSURE TO HARMFUL SUBSTANCES OR ENVIRONMENTS
30 Exposure to harmful substances or environments, unspecified
31* Contact with electric current
310 Contact with electric current, unspecified
311 Contact with electric current of machine, tool, appliance, or light fixture
312 Contact with wiring, transformers, or other electrical components



313 Contact with overhead power lines
314 Contact with underground, buried power lines
315 Struck by lightning
319 Contact with electric current, n.e.c.
32* Contact with temperature extremes
320 Contact with temperature extremes, unspecified
321 Exposure to environmental heat
322 Exposure to environmental cold
323 Contact with hot objects or substances
324 Contact with cold objects or substances
33* Exposure to air pressure changes
330 Exposure to air pressure change, unspecified
331 Pressure changes underwater
332 Pressure changes in airplane, other aircraft
339 Exposure to air pressure change, n.e.c.
34* Exposure to caustic, noxious, or allergenic substances
340 Exposure to caustic, noxious, or allergenic substances, unspecified
341* Inhalation of substance
3410 Inhalation of substance, unspecified
3411 Inhalation in enclosed, restricted, or confined space
3412 Inhalation in open or nonconfined space
342 Contact with skin or other exposed tissue
343* Injections, stings, venomous bites
3430 Injections, stings, venomous bites, unspecified
3431 Needle sticks
3432 Bee, wasp, hornet sting
3433 Other stings or venomous bites
3439 Injections, stings, venomous bites, n.e.c.
344 Ingestion of substance
349 Exposure to caustic, noxious, or allergenic substances, n.e.c.
35* Exposure to noise
350 Exposure to noise, unspecified
351 Exposure to noise over time
352 Exposure to noise in single incident
36* Exposure to radiation
360 Exposure to radiation, unspecified
361 Exposure to sun
362 Exposure to welding light

363 Exposure to radioactive material
369 Exposure to radiation, n.e.c.
37 Exposure to traumatic or stressful event, n.e.c.
38* Oxygen deficiency, n.e.c.
381 Drowning, submersion
382 Choking on object or substance
383 Depletion of oxygen from cave-in or collapsed materials
384 Depletion of oxygen in other enclosed, restricted, or confined space
389 Other oxygen deficiency, n.e.c.
39 Exposure to harmful substances or environments, n.e.c.
4* TRANSPORTATION ACCIDENTS
40 Transportation accident, unspecified
41* Highway accident
410 Highway accident, unspecified
411* Collision between vehicles, mobile equipment
4110 Collision between vehicles, mobile equipment, unspecified
4111 Re-entrant collision
4112 Moving in same direction
4113 Moving in opposite directions, oncoming
4114 Moving in intersection
4115 Moving and standing vehicle, mobile equipment--in roadway
4116 Moving and standing vehicle, mobile equipment--side of road
4119 Collision between vehicles, mobile equipment, n.e.c.
412 Vehicle struck object in roadway
413 Vehicle struck object on side of road
414* Noncollision accident
4140 Noncollision accident, unspecified
4141 Jack-knifed or overturned--no collision
4142 Ran off highway--no collision
4143 Struck by shifting load
4144 Sudden start or stop, n.e.c.
4149 Noncollision accident, n.e.c.
419 Highway accident, n.e.c.
42* Nonhighway accident, except rail, air, water
420 Nonhighway accident, unspecified
421 Collision between vehicles or mobile equipment



422 Vehicle, mobile equipment struck stationary object
423* Noncollision accident
4230 Noncollision accident, unspecified
4231 Fall from moving vehicle, mobile equipment
4232 Fell from and struck by vehicle, mobile equipment
4233 Overturned
4234 Loss of control
4235 Struck by shifting load
4236 Sudden start or stop, n.e.c.
4239 Noncollision accident, n.e.c.
429 Nonhighway accident, n.e.c.
43* Pedestrian, nonpassenger struck by vehicle, mobile equipment
430 Pedestrian struck by vehicle, mobile equipment, unspecified
431 Pedestrian struck by vehicle, mobile equipment in roadway
432 Pedestrian struck by vehicle, mobile equipment on side of road
433 Pedestrian struck by vehicle, mobile equipment in parking lot or non-roadway area
44* Railway accident
440 Railway accident, unspecified
441 Collision between railway vehicles
442 Collision between railway vehicle and other vehicle
443 Collision between railway vehicle and other object
444 Fell from and struck by railway vehicle
445 Derailment
446 Explosion, fire, n.e.c.
447 Fall in, on, or from railway vehicle in motion, n.e.c.
449 Railway accident, n.e.c.
45* Water vehicle accident
450 Water vehicle accident, unspecified
451 Collision
452 Explosion, fire, n.e.c.
453 Fall from ship, boat, n.e.c.
454 Fall on ship, boat
455 Sinking, capsized water vehicle
459 Water vehicle accident, n.e.c.
46* Aircraft accident
460 Aircraft accident, unspecified
461 During takeoff or landing

469 Aircraft accident, n.e.c.
49 Transportation accident, n.e.c.
5* FIRES AND EXPLOSIONS 50 Fire or explosion, unspecified
51* Fire--unintended or uncontrolled
510 Fire, unspecified
511 Fire in residence, building, or other structure
512 Forest, brush, or other outdoor fire
513 Ignition of clothing from controlled heat source
519 Fire, n.e.c.
52* Explosion
520 Explosion, unspecified
521 Explosion of battery
522 Explosion of pressure vessel or piping
529 Explosion, n.e.c.
6* ASSAULTS AND VIOLENT ACTS 60 Assaults and violent acts, unspecified
61* Assaults and violent acts by person(s)
610 Assaults and violent acts by person(s), unspecified
611 Biting
612 Hitting, kicking, beating
613 Shooting
614 Squeezing, pinching, scratching, twisting
615 Stabbing
616 Rape
617 Threats or verbal assaults
619 Assaults and violent acts by person(s), n.e.c.
62* Self-inflicted injury
620 Self-inflicted injury, unspecified
621 Suicide, attempted suicide
622 Self-inflicted injury or fatality--intent unknown
63* Assaults by animals
630 Assaults by animals, unspecified
631 Nonvenomous bites
639 Assaults by animals, n.e.c.
9 OTHER EVENTS OR EXPOSURES
9999 Nonclassifiable

* - Asterisks indicate division, major group, or group titles.
Source: U. S. Department of Labor, Bureau of Labor Statistics at www.bls.gov/iif/oshoiics.htm

SOURCE OF INJURY OR ILLNESS CODE STRUCTURE

DEFINITION

The source of injury or illness identifies the object, substance, bodily motion, or exposure which directly produced or inflicted the previously identified injury or illness

RULES OF SELECTION:

3.1 Name as the source of injury or illness the object, substance, element, or bodily motion which directly produced the injury or illness previously identified in the nature of injury or illness classification.

3.2 If the injury or illness was inflicted by a specific part of a machine, tool, or vehicle, name the whole machine, tool, or vehicle as the source of injury except when:

-- the part separated from or was independent of the "whole";
-- the event is overexertion;
-- the injury was inflicted by an overhead powerline or the electrical cord of an appliance, tool, or machine;
-- the injury was inflicted by the floor of a vehicle in a non-transportation incident; or
-- the incident involved a tractor and agricultural equipment combination.

In these instances, code that part as source.

3.3 If the injury or illness was inflicted by a specific part of a structure (window, door, stairs) name that part as the source of injury.

3.4 When an injury or illness was produced by a filled container, name the container, not the contents, as the source unless the injury or illness was directly inflicted by the contents, such as hot liquids or chemicals.

3.5. Coding Bodily motion or position as the source of injury or illness:

3.5.1 Name Bodily motion or position as the source of injury or illness only when the injury resulted solely from the stress or strain induced by the free movement of the body or its parts (voluntary or involuntary), or from the assumption of a strained or unnatural body position. Bodily motion or position includes injuries or illnesses resulting from reaching, turning, twisting, bending, walking, climbing, running, and from efforts to recover from a loss of equilibrium, provided that the loss of equilibrium does not result in a fall or in forcible contact with an object above the working surface.

Do not name Bodily motion or position as the source of injury or illness if the injury or illness resulted from any of the following:

1) falling
2) bumping into or striking an external object
3) nonrepetitive lifting, pushing, pulling, wielding, or throwing an external object

3.5.2 For injuries or illnesses in which either Repetitive motion or Sustained viewing is coded as the event, select bodily motion or position as the source of injury or illness.

3.6 If, as the result of a transportation accident, a person who was in or on a vehicle or mobile equipment is injured, name the vehicle or mobile equipment as the source of injury.

3.7 Selecting Source from multiple objects or substances:

3.7.1 When an injury results from forcible contact with two or more objects, either simultaneously or in rapid sequence, and it is impossible to determine which object directly produced the injury, select the source as follows:

1) When the choice is between a moving object and a stationary object, select the moving object. Example: If a person is struck by a moving vehicle and thrown against a post, name the vehicle as the source of injury.
2) When the choice is between two moving objects or between two stationary objects, select that which was contacted last. Example: If a person falls from an elevator, striking one or more objects in the course of his fall, but finally striking the floor, name the floor surface as the source of injury.

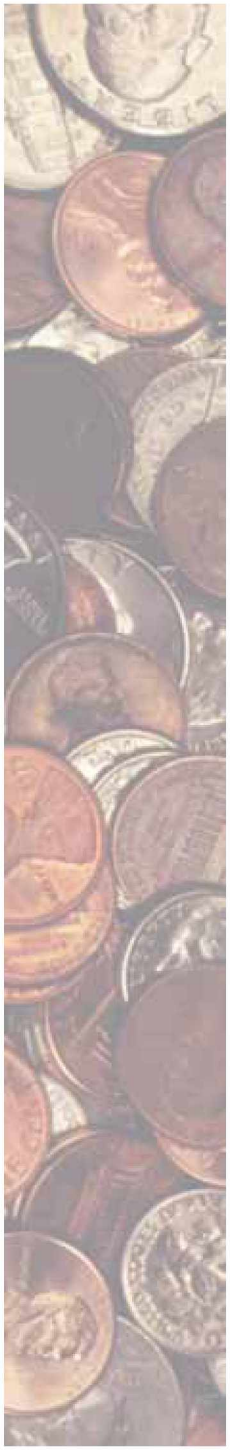
3.7.2 When an injury or illness results from two or more different objects or substances, all of which contributed to producing the injury or illness, select the source code as follows:

1) When there are two substances from the Chemical Division, select the appropriate "Multiple" code for that combination of chemicals.
2) When the two objects or substances are in the same Division, select the Divisional n.e.c. code for that Division. If they are in the same group within a division, select the group n.e.c.
3) When the two objects or substances are not in the same Division, use the code for Other sources, n.e.c.

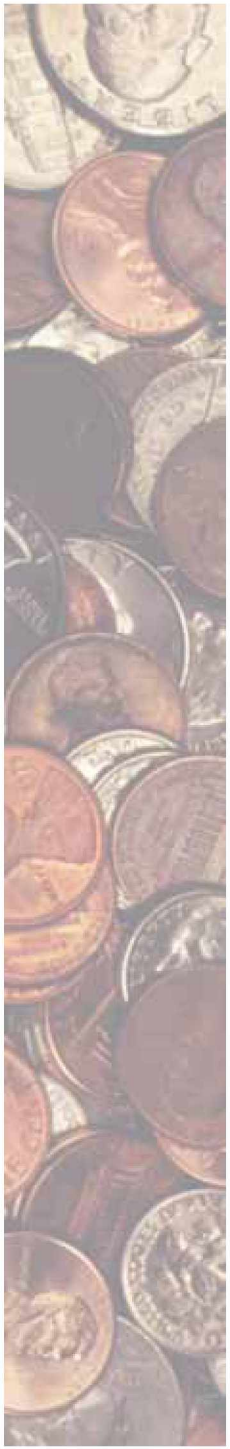
3.8 Select Weather and atmospheric conditions or geological events--Floods, Earthquakes, Avalanches--as the source of injury or illness when that is the only possible source identified. For example, if a worker sustained multiple injuries in an earthquake and no othe rsource could be

determined, select earthquake as the source of injury. However, if an employee were driving in a rainstorm and had an automobile accident resulting in injury, select vehicle as the source.

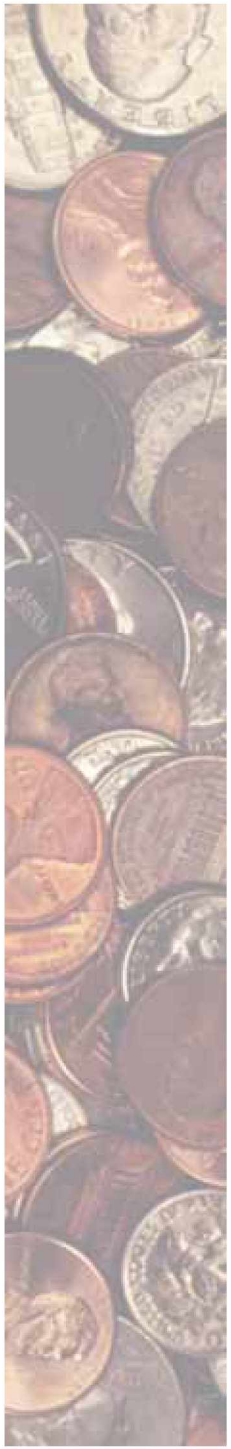
Division Title	Source of Injury or Illness Rubric
0* CHEMICALS AND CHEMICAL PRODUCTS	
	00 Chemicals and chemical products, unspecified
	01* Acids
	010 Acids, unspecified
	011* Acid gases--halogen
	0110 Acid gases, unspecified
	0111 Hydrogen bromide
	0112 Hydrogen chloride
	0113 Hydrogen fluoride
	0114 Hydrogen iodide
	0119 Acid gases, n.e.c.
	012* Inorganic acids--halogens
	0120 Inorganic acids--halogens, unspecified
	0121 Hydriodic acid
	0122 Hydrobromic acid
	0123 Hydrochloric acid
	0124 Hydrofluoric acid
	0129 Inorganic acids--halogens, n.e.c.
	013* Inorganic acids--other
	0130 Inorganic acids, unspecified
	0131 Chlorine-containing oxyacids
	0132 Nitric acid
	0133 Phosphoric acid
	0134 Sulfuric acid
	0139 Inorganic acids, n.e.c.
	014* Organic acids
	0140 Organic acids, unspecified
	0141 Acetic acid, vinegar
	0142 Acrylic acids
	0143 Carbolic acids
	0144 Hydrocyanic acid
	0145 Peracetic acid

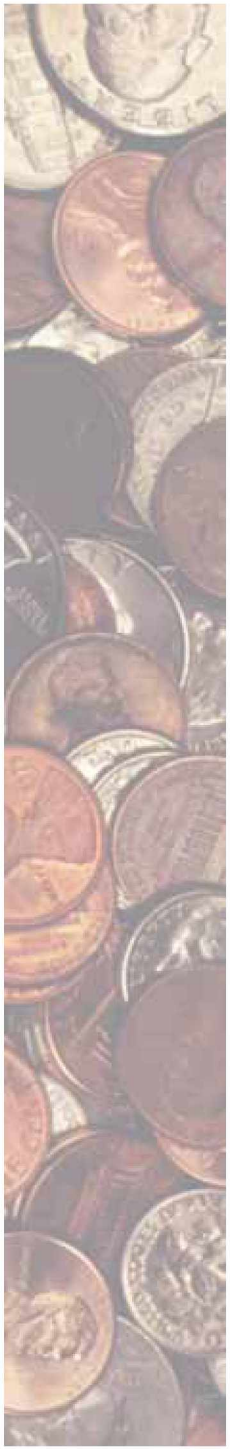


0146 Picric acid
0149 Organic acids, n.e.c.
018 Multiple acids
019 Acids, n.e.c.
02* Alkalies
020 Alkalies, unspecified
021* Calcium hydroxides, calcium oxides
0210 Calcium hydroxide, calcium oxides, unspecified
0211 Cement, mortar mix--dry
0212 Cement, mortar--wet
0213 Lime
0219 Calcium hydroxide, calcium oxides, n.e.c.
022* Carbonates--calcium, sodium
0220 Carbonates--calcium, sodium, unspecified
0221 Limestone, calcium carbonate
0222 Sodium bicarbonate, baking soda
0223 Sodium carbonate, soda ash
0229 Carbonates, n.e.c.
023 Lithium hydroxide
024 Sodium and potassium hydroxide, potassium carbonate
028 Multiple alkalies
029 Alkalies, n.e.c.
03* Aromatics and hydrocarbon derivatives, except halogenated
030 Aromatics and hydrocarbon derivatives, except halogenated, unspecified
031* Alcohols
0310 Alcohol, unspecified
0311 Antifreeze
0312 Ethanol
0313 Ethylene glycol
0314 Fusel oil
0315 Methanol
0316 Propanol
0319 Alcohol, n.e.c.
032* Aldehydes
0320 Aldehydes, unspecified
0321 Acetaldehyde
0322 Acrolein

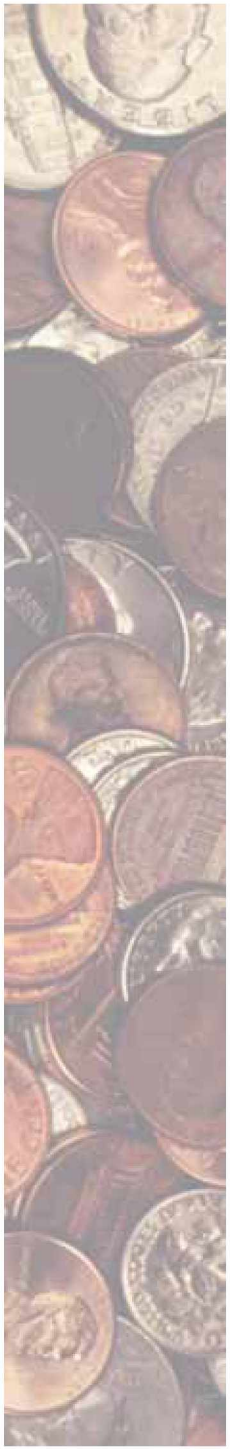


0323 Formaldehyde
0324 Formalin
0329 Aldehydes, n.e.c.
033* Amines--nonaromatic
0330 Nonaromatic amines, unspecified
0331 Methyl amine
0339 Nonaromatic amines, n.e.c.
034* Aromatics
0340 Aromatics, unspecified
0341 Aniline and other aromatic amines
0342 Benzene
0343 Toluene
0344 Xylene
0349 Aromatics, n.e.c.
035* Ethers
0350 Ethers, unspecified
0351 Diethyl ether
0352 Dimethyl ether
0353 Ethylene oxide
0354 Methyl ethyl ether
0355 Vinyl ether
0359 Ethers, n.e.c.
036* Ketones
0360 Ketones, unspecified
0361 Acetone
0362 Mesityl oxide
0363 Methyl ethyl ketone
0364 Methyl N-butyl ketone
0369 Ketones, n.e.c.
037* Peroxides
0370 Peroxides, unspecified
0371 Benzoyl peroxide
0372 Hydrogen peroxide
0373 Lithium peroxide
0374 Potassium peroxide
0375 Sodium peroxide
0379 Peroxides, n.e.c.

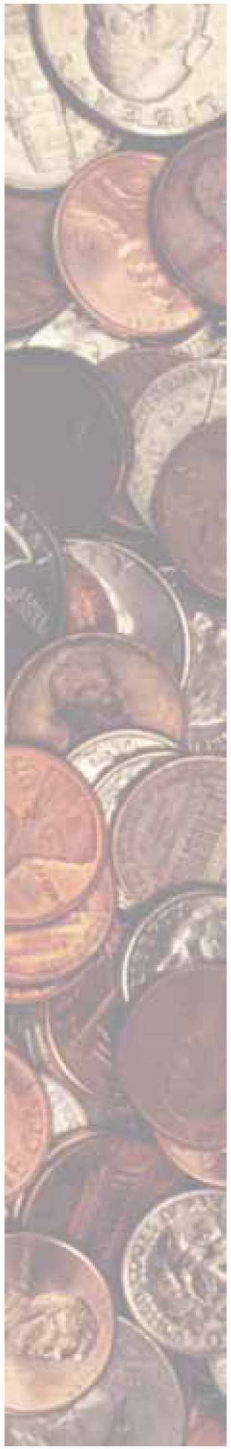


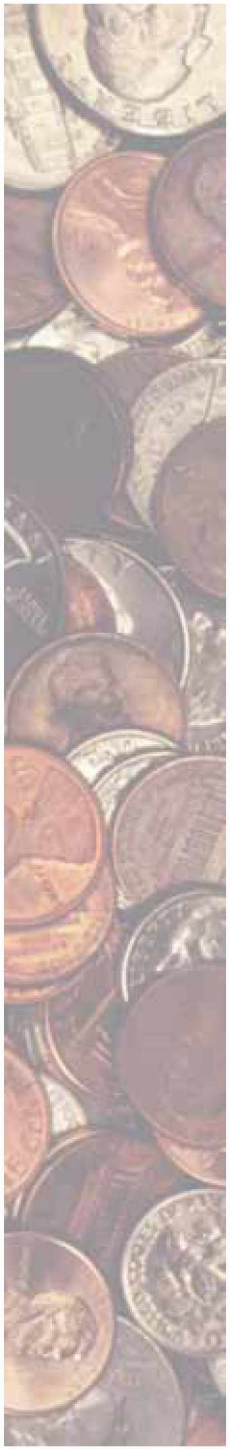


038 Multiple aromatics and hydrocarbon derivatives, except halogenated
039* Aromatics and hydrocarbon derivatives, except halogenated, n.e.c.
0391 Nitro hydrocarbons
0399 Other aromatics and hydrocarbon derivatives, except halogenated, n.e.c.
04* Halogens and halogen compounds
040 Halogens and halogen compounds, unspecified
041* Bromine and bromine compounds
0410 Bromine compounds, unspecified
0411 Bromine
0412 Ethylene dibromide
0413 Methyl bromide
0414 Potassium bromide
0419 Bromine compounds, n.e.c.
042* Chlorine and chlorine compounds
0420 Chlorine compounds, unspecified
0421 Carbon tetrachloride
0422 Chlorine, chlorine bleach
0423 Methyl chloride
0424 Pentachlorophenol
0425 Perchloroethylene
0426 Polychlorinated biphenyls (PCBs)
0427 Trichloroethylene
0429 Chlorine compounds, n.e.c.
043* Fluorine and fluorine compounds
0430 Fluorine compounds, unspecified
0431 Fluorine
0432 Fluorotrichloromethane
0433 Fluorocarbons, n.e.c.
0434 Methyl fluoride
0439 Fluorine compounds, n.e.c.
044 Iodine and iodine compounds
048 Multiple halogens and halogen compounds
049 Halogens and halogen compounds, n.e.c.
05* Metallic particulates, trace elements, dusts, powders, fumes
050 Metallic particulates, trace elements, dusts, powders, fumes, unspecified
051 Arsenic, arsenic compound
052 Beryllium and beryllium compounds

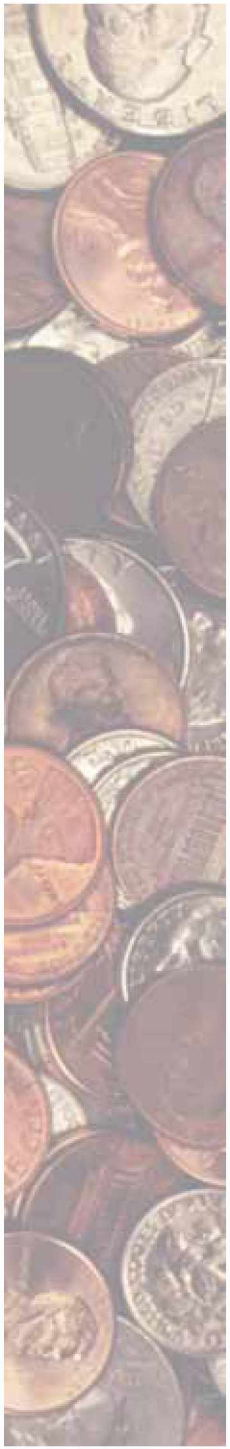


053 Cadmium and cadmium compounds
054* Lead and lead compounds
0540 Lead and lead compounds, unspecified
0541 Inorganic lead compounds
0542 Organic lead compounds
0549 Lead and lead compounds, n.e.c.
055 Mercury and compounds
056* Other metallics and compounds
0561 Aluminum and aluminum compounds
0562 Antimony
0563 Chromium and chromium compounds
0564 Iron and iron compounds
0565 Magnesium and magnesium compounds
0566 Manganese
0567 Nickel and nickel compounds
0568 Zinc and zinc compounds
0569 Other metallics and compounds, n.e.c.
057 Welding or soldering fumes, unspecified or n.e.c.
058 Multiple metallics and metallic compounds
059 Metallic particulates, trace elements, dusts, powders, fumes, n.e.c.
06* Agricultural chemicals and other pesticides
060 Agricultural chemicals and other pesticides, unspecified
061 Fertilizers, plant food, n.e.c.
062 Fumigants, n.e.c.
063 Fungicides
064* Herbicides
0640 Herbicides, unspecified
0641 Benzoic and phenylacetic acids
0642 Bipyridyls
0643 Carbamate and thiocarbamate herbicides
0644 Dinitro compounds
0645 Phenols
0646 Triazines
0649 Herbicides, n.e.c.
065* Insecticides
0650 Insecticides, unspecified
0651 Carbamate insecticides

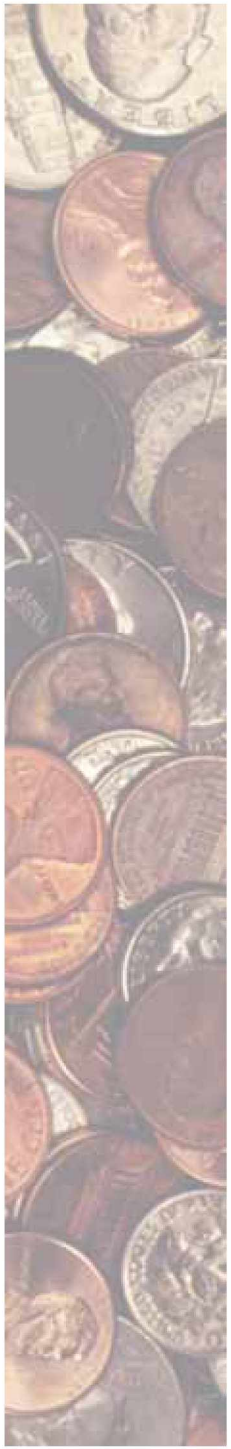


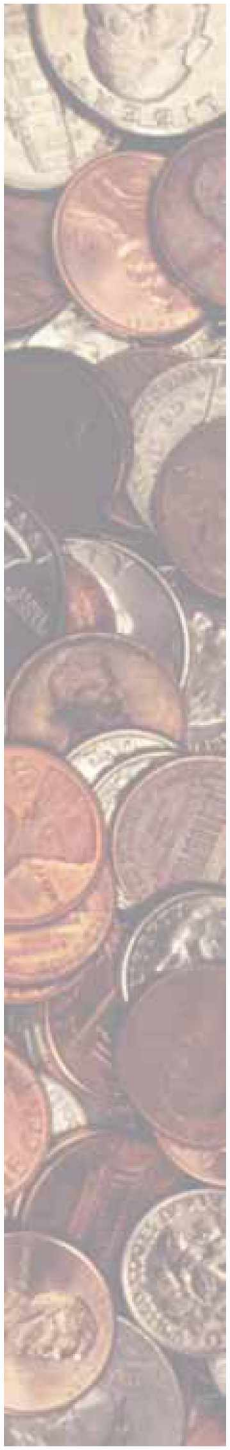


0652 Organochlorine compounds
0653 Organophosphorus compounds
0658 Multiple insecticides
0659 Insecticides, n.e.c.
066 Rodenticides
068 Multiple agricultural and horticultural chemicals
069 Agricultural and horticultural chemicals, n.e.c.
07* Chemical products--general
070 Chemical products, unspecified
071 Adhesives, glues, n.e.c.
072* Beauty preparations, cosmetics, n.e.c.
0720 Beauty preparations, cosmetics, unspecified
0721 Hair preparations
0729 Other beauty preparations, cosmetics
073* Cleaning and polishing agents, disinfectants, n.e.c.
0730 Cleaning and polishing agents, unspecified
0731 Bleach--nonchlorine, nonperoxide
0732 Disinfectants
0733 Drain and oven cleaners
0734 Polishes
0735 Scouring powders
0736 Soap products
0737 Synthetic detergents and shampoos
0738 Multiple cleaning and polishing agents
0739 Other cleaning and polishing agents
074* Drugs, alcohol, medicines
0740 Drugs and medicines, unspecified
0741 Alcoholic beverages
0742 Drugs--nonmedicinal
0743 Medicines
0748 Multiple drugs, medicines
0749 Drugs and medicines, n.e.c.
075* Explosives, blasting agents, n.e.c.
0750 Explosives, blasting agents, unspecified
0751 Dynamite
0752 Flammable gas, unspecified
0753 Gunpowder

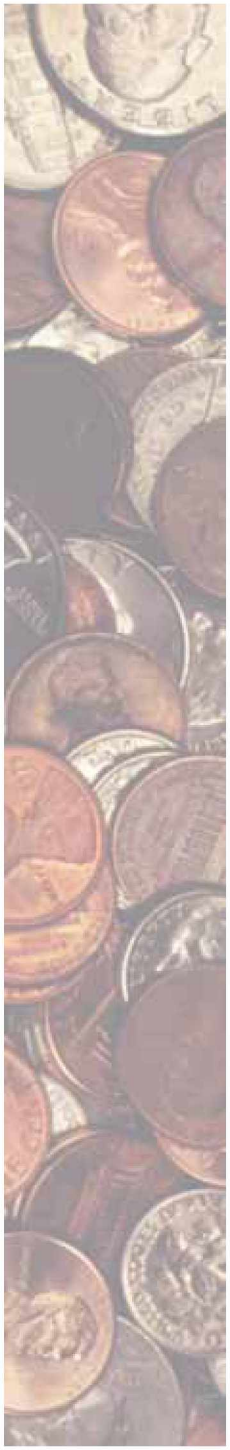


0754 Pyrotechnics, fireworks
0759 Other explosives, blasting agents
076* Paint, lacquer, shellac, varnish, n.e.c.
0760 Paint, lacquer, shellac, varnish, unspecified
0761 Lacquer, shellac, varnish
0762 Paint
0768 Multiple paint, lacquer, shellac, or varnishes
0769 Other paint, lacquer, shellac, varnish
077* Solvents, degreasers, n.e.c.
0770 Solvents, degreasers, unspecified
0771 Naphtha solvents
0772 Paint removers, thinners
0773 Dry cleaning fluids, n.e.c.
0778 Multiple solvents, degreasers
0779 Other solvents, degreasers
079* Other chemical products
0790 Other chemical products, unspecified
0791 Dyes, inks
0792 Tear gas, mace
0793 Photographic and copying solutions
0799 Chemical products, n.e.c.
08* Coal, natural gas, petroleum fuels and products, n.e.c.
080 Coal, natural gas, petroleum fuels and products, unspecified
081* Coal and coal products
0810 Coal products, unspecified
0811 Coal
0812 Coke and other coal manufactures
0819 Coal and coal products, n.e.c.
082 Natural gas
083 Petroleum, crude oil
084* Petroleum fuels, distillates, products, n.e.c.
0840 Petroleum fuels, distillates, products, unspecified
0841 Butane
0842 Gasoline, diesel fuel, jet fuel
0843 Kerosene, heating oil
0844 Lubricating greases, cutting oils
0845 Propane





0849 Other petroleum fuels, distillates, products
089 Coal, natural gas, petroleum fuels and products, n.e.c.
09* Other chemicals
091* Ammonia and ammonium compounds
0910 Ammonia and ammonium compounds, unspecified
0911 Ammonia, anhydrous ammonia
0912 Ammonium hydroxide
0913 Ammonium nitrate
0914 Ammonium sulfate
0918 Multiple ammonia and ammonium compounds
0919 Ammonia and ammonium compounds, n.e.c.
092* Cryogenic gases
0920 Cryogenic gases, unspecified
0921 Liquid fluorine
0922 Liquid helium
0923 Liquid hydrogen
0924 Liquid nitrogen
0925 Liquid oxygen
0929 Cryogenic gases, n.e.c.
093* Cyanide and cyanide compounds, n.e.c.
0930 Cyanide and cyanide compounds, unspecified
0931 Hydrogen cyanide
0938 Multiple cyanides
0939 Other cyanide and cyanide compounds
094* Oxygen and oxygen compounds, n.e.c.
0940 Oxygen and oxygen compounds, unspecified
0941 Carbon monoxide
0942 Carbon dioxide, dry ice
0943 Nitrogen oxides
0944 Oxygen--nonliquified
0945 Ozones
0948 Multiple oxygen and oxygen compounds
0949 Other oxygen and oxygen compounds, n.e.c.
095* Plastics, resins
0950 Plastics, unspecified
0951 Cyanates
0952 Resins



0953 Urethanes
0954 Vinyl chloride, polyvinyl chloride
0959 Plastics, resins, n.e.c.
096* Sewer gas, mine gas, methane
0960 Sewer gas, mine gas, unspecified
0961 Methane gas
0962 Mine gas
0963 Sewer gas
097* Sulfur and sulfur compounds
0970 Sulfur and sulfur compounds, unspecified
0971 Carbon bisulfide
0972 Hydrogen sulfide
0973 Sulfur dioxide
0978 Multiple sulfur and sulfur compounds
0979 Sulfur and sulfur compounds, n.e.c.
098* Multiple chemicals or chemical mixtures, n.e.c.
0980 Multiple chemicals or chemical mixtures, unspecified
0981 Ammonia and chlorine
0982 Chlorine and phosphoric acid
0983 Chlorine and cleaning agent, n.e.c.
0989 Other multiple chemicals or chemical mixtures
099 Chemicals and chemical products, n.e.c.

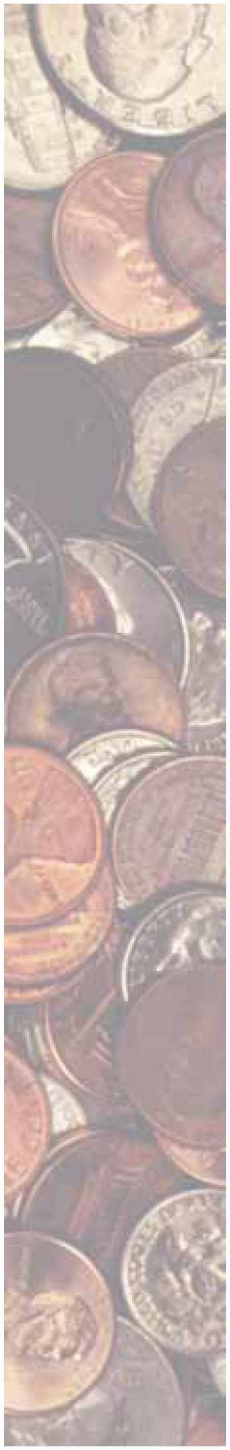
1* CONTAINERS

10 Containers, unspecified
11* Containers--nonpressurized
110 Containers--nonpressurized, unspecified
111 Bags, sacks, totes
112 Barrels, kegs, drums
113 Bottles, jugs, flasks
114 Boxes, crates, cartons
115 Buckets, baskets, pails
116 Cans
117 Pots, pans, trays
118 Tanks, bins, vats
119 Containers--nonpressurized, n.e.c.
12* Containers--pressurized
120 Containers--pressurized, unspecified
121 Boilers

122 Hoses
123 Oxygen tanks
124 Pressure lines, except hoses
125 Propane tanks
129 Containers--pressurized, n.e.c.
13* Containers--variable restraint
130 Containers--variable restraint, unspecified
131 Bundles, bales
132 Packages, parcels
133 Reels, rolls
139 Containers--variable restraint, n.e.c.
14* Dishes, drinking cups, beverage glasses
140 Dishes, drinking cups, beverage glasses, unspecified
141 Dishes, bowls
142 Drinking cups, beverage glasses
149 Dishes, drinking cups, beverage glasses, n.e.c.
15* Luggage, handbags
150 Luggage, unspecified
151 Briefcases
152 Handbags, pocketbooks, wallets
153 Suitcases
159 Luggage, n.e.c.
16 Skids, pallets
19 Containers, n.e.c.

2* FURNITURE AND FIXTURES

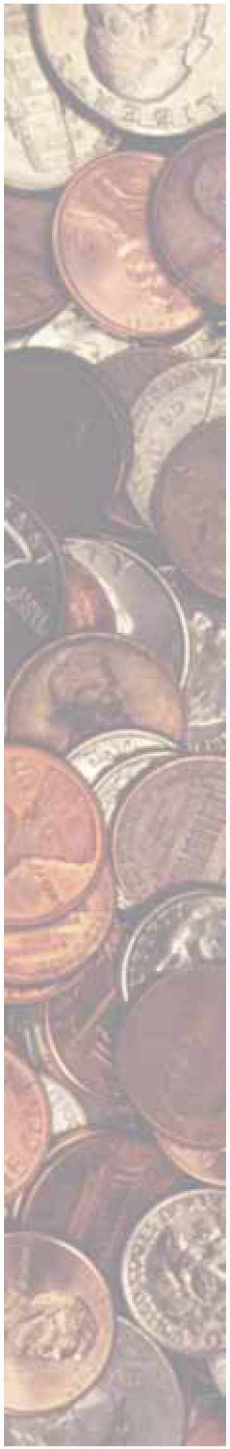
20 Furniture and fixtures, unspecified
21* Cases, cabinets, racks, shelves
210 Cases, cabinets, racks, shelves, unspecified
211 Bookcases
212 Cabinets, cases--display, storage
213 Counters, counter tops
214 Garment racks, other racks
215 Lockers
216 Partitions
217 Shelving
219 Cases, cabinets, racks, shelves, n.e.c.
22* Floor, wall, window coverings



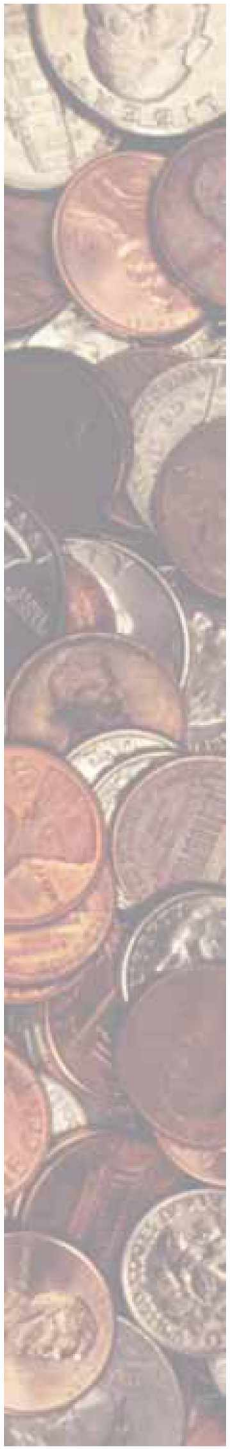
220 Floor, wall, window coverings, unspecified
221 Floor coverings, nonstructural
222 Wall coverings
223 Window coverings, blinds, shades, or draperies
229 Floor, wall, window coverings, n.e.c.
23* Furniture
230 Furniture, unspecified
231 Beds, bedding, mattresses
232 Benches, workbenches, saw horses
233 Chairs
234 Desks
235 Sofas
236 Tables, worktables
239 Furniture, n.e.c.
24* Other fixtures
240 Other fixtures, unspecified
241* Lighting equipment
2410 Lighting equipment, unspecified
2411 Lamps
2412 Light bulbs
2419 Lighting equipment, n.e.c.
242* Plumbing fixtures
2420 Plumbing fixtures, unspecified
2421 Bathtubs
2422 Sinks
2423 Toilets
2429 Plumbing fixtures, n.e.c.
249 Other fixtures, n.e.c.
29 Furniture and fixtures, n.e.c.

3* MACHINERY

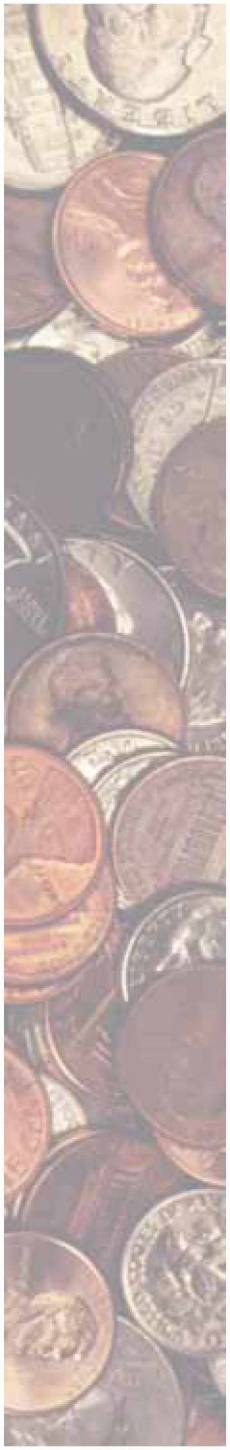
30 Machinery, unspecified
31* Agricultural and garden machinery
310 Agricultural and garden machinery, unspecified
311* Harvesting and threshing machinery
3110 Harvesting and threshing machinery, unspecified
3111 Balers
3112 Combines
3113 Harvesters, reapers



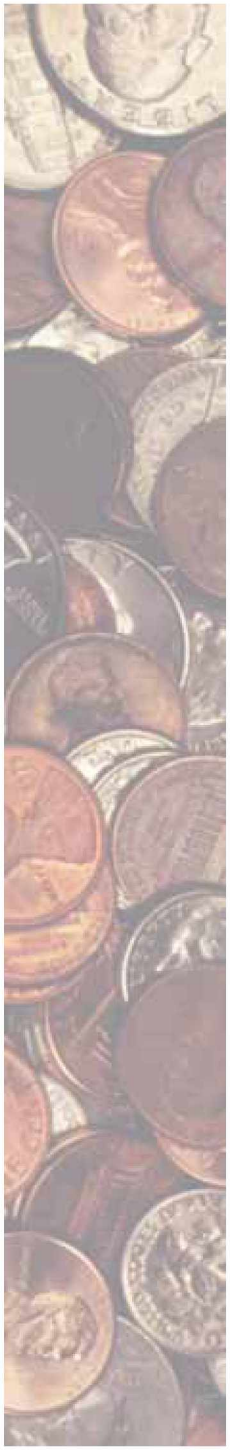
3114 Threshers
3119 Harvesting and threshing machinery, n.e.c.
312* Mowing machinery
3120 Mowing machinery, unspecified
3121 Lawn mowers--nonriding, powered
3122 Lawn mowers--riding
3123 Mowers--tractor
3129 Mowing machinery, n.e.c.
313* Plowing, planting, and fertilizing machinery
3130 Plowing, planting, and fertilizing machinery, unspecified
3131 Plowing and cultivating machinery
3132 Seed planting machinery
3133 Spreading machinery--agricultural
3139 Plowing, planting, and fertilizing machinery, n.e.c.
319* Other agricultural and garden machinery
3190 Other agricultural and garden machinery, unspecified
3191 Dairy and milk processing machinery--specialized
3192 Feed grinders, crushers, mixers--agricultural
3193 Spraying and dusting machinery--agricultural
3199 Agricultural and garden machinery, n.e.c.
32* Construction, logging, and mining machinery
320 Construction, logging, and mining machinery, unspecified
321* Excavating machinery
3210 Excavating machinery, unspecified
3211 Backhoes
3212 Bulldozers
3213 Steam and power shovels
3214 Trenchers
3219 Excavating machinery, n.e.c.
322* Loaders
3220 Loaders, unspecified
3221 Bucket loaders
3222 End loaders
3223 Front end loaders
3229 Loaders, n.e.c.
323* Logging and wood processing machinery--specialized
3230 Logging and wood processing machinery--specialized, unspecified



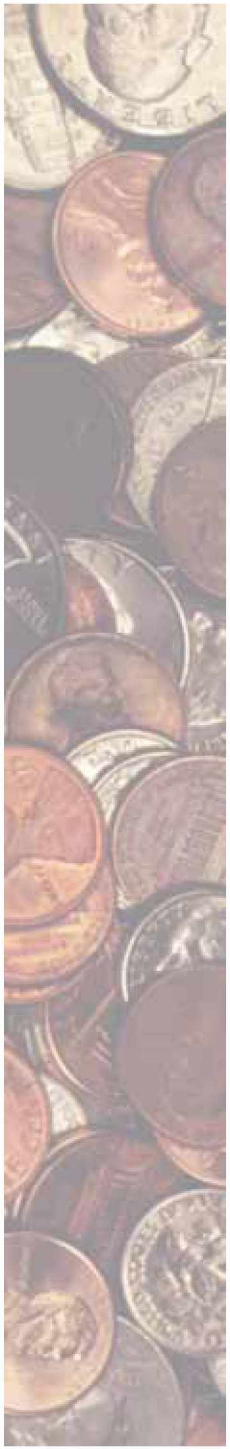
3231 Chippers
3232 Debarkers
3233 Harvesters, including feller-buncher, sheet
3234 Log loaders, including heel boom
3235 Forwarder/yarder
3236 Mechanical harvester
3237 Slasher
3238 Skidder--cable and grapple
3239 Logging and wood processing machinery--specialized, n.e.c.
324* Mining and drilling machinery
3240 Mining and drilling machinery, unspecified
3241 Drilling machines, drilling augers
3242 Mineral sorters, separators, concentrators
3243 Tunnelling machines
3249 Mining and drilling machinery, n.e.c.
325* Road grading and surfacing machinery
3250 Road grading and surfacing machinery, unspecified
3251 Asphalt and mortar spreaders
3252 Graders, levellers, planers, scrapers
3253 Road linemarking machinery
3254 Steam rollers, road pavers
3259 Road grading and surfacing machinery, n.e.c.
329* Other construction, logging, and mining machinery
3290 Other contruction, logging, and mining machinery, unspecified
3291 Agitators, mixers--earth, mineral
3292 Compactors, crushers, pulverizers--earth, mineral
3293 Pile drivers, tamping machinery
3294 Pile extractors
3299 Construction, logging, and mining machinery, n.e.c.
33* Heating, cooling, and cleaning machinery and appliances
330 Heating, cooling, and cleaning machinery and appliances, unspecified
331* Cooling and humidifying machinery and appliances
3310 Cooling and humidifying machinery and appliances, unspecified
3311 Air conditioning units
3312 Fans, blowers--wall, floor, ceiling, ventilation
3313 Humidifiers, dehumidifiers, vaporizers
3314 Refrigerators, freezers, ice makers



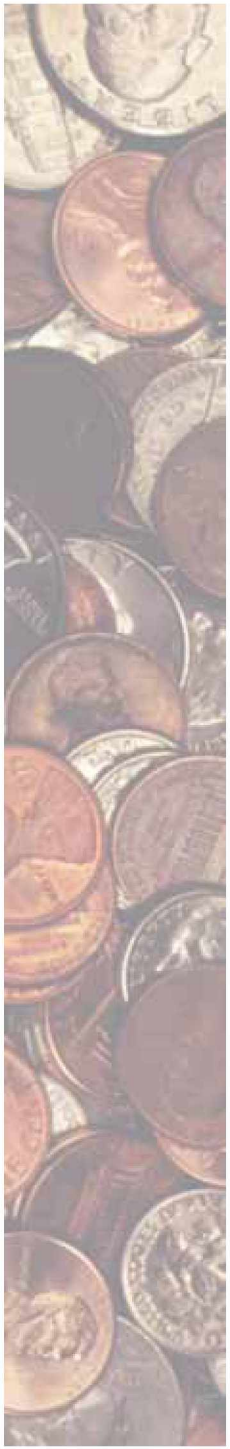
3319 Cooling and humidifying machinery and appliances, n.e.c.
332* Heating and cooking machinery and appliances
3320 Heating and cooking machinery and appliances, unspecified
3321 Beverage heating and percolating equipment and appliances
3322 Broiling and frying equipment and appliances
3323 Fabric pressers and ironing appliances
3324 Furnaces, heaters
3325 Kilns
3326 Ranges, cooking ovens, grills, toasters, food warmers
3327 Steaming equipment and appliances
3329 Heating and cooking machinery and appliances, n.e.c.
333* Washers, dryers, and cleaning machinery and appliances
3330 Washers, dryers, and cleaning machinery and appliances, unspecified
3331 Car or vehicle washing machinery
3332 Clothes dryers
3333 Clothes washers
3334 Dish washers
3335 Hair and hand dryers
3336 Vacuum cleaners
3339 Washers, dryers, and cleaning machinery and appliances, n.e.c.
339 Heating, cooling, and cleaning machinery and appliances, n.e.c.
34* Material handling machinery
340 Material handling machinery, unspecified
341* Conveyors--gravity
3410 Conveyors--gravity, unspecified
3411 Chutes
3412 Conveyors--roller
3413 Conveyors--wheel
3419 Conveyors--gravity, n.e.c.
342* Conveyors--powered
3420 Conveyors--powered, unspecified
3421 Conveyors--belt
3422 Conveyors--bucket, cup
3423 Conveyors--chain
3424 Conveyors--live roller
3425 Conveyors--pan
3426 Conveyors--pneumatic



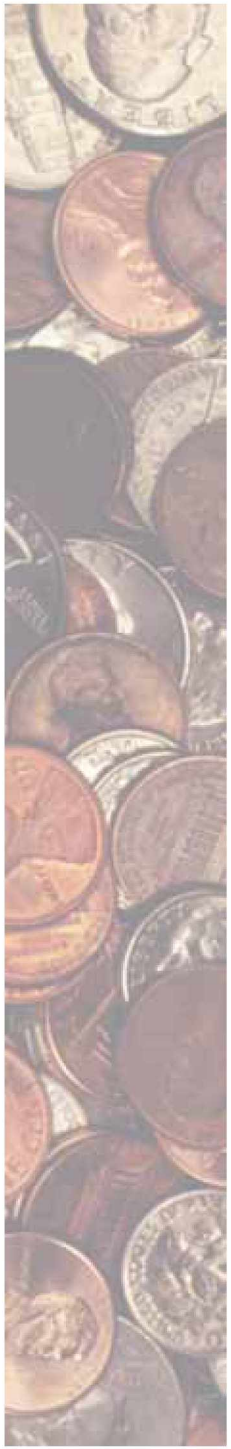
3427 Conveyors--screw, auger
3428 Conveyors--slot
3429 Conveyors--powered, n.e.c.
343* Cranes
3430 Cranes, unspecified
3431 Cranes--floating
3432 Cranes--gantry
3433 Cranes--hammerhead
3434 Cranes--mobile, truck, rail mounted
3435 Cranes--monorail and underhung
3436 Cranes--overhead
3437 Cranes--portal, tower, pillar
3438 Storage and retrieval hoist systems
3439 Cranes, n.e.c.
344* Overhead hoists
3440 Overhead hoists, unspecified
3441 Overhead hoists--electric powered
3442 Overhead hoists--manual
3443 Overhead hoists--pneumatic powered
3449 Overhead hoists, n.e.c.
345* Derricks
3450 Derricks, unspecified
3451 Derricks--A-frame
3452 Derricks--basket
3453 Derricks--breast
3454 Derricks--gin pole
3455 Derricks--guy
3459 Derricks, n.e.c.
346* Elevators, aerial lifts
3460 Elevators, aerial lifts, unspecified
3461 Bucket or basket hoist--truck mounted
3462 Dumbwaiters
3463 Elevators--electric
3464 Elevators--hydraulic
3465 Elevators--hand operated
3466 Manlifts
3469 Elevators, aerial lifts, n.e.c.

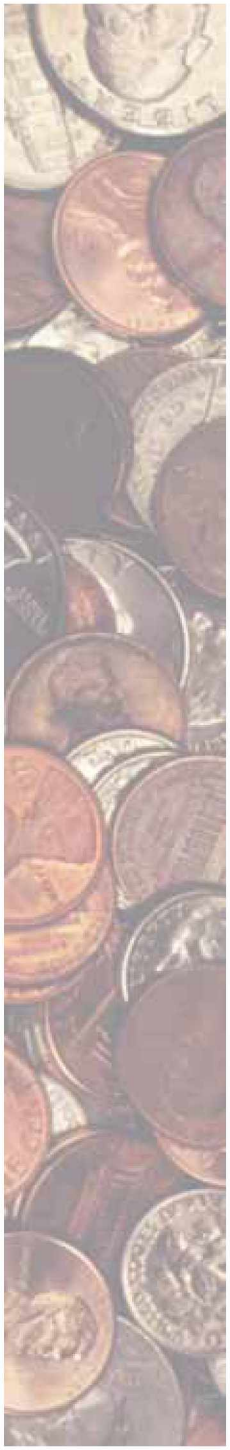


347* Jacks
3470 Jacks, unspecified
3471 Jacks--hydraulic
3472 Jacks--mechanical
3473 Jacks--pneumatic
3479 Jacks, n.e.c.
349* Other material handling machinery
3491 Winders, unwinders
3499 Material handling machinery, n.e.c.
35* Metal, woodworking, and special material machinery
350 Metal, woodworking, and special material machinery, unspecified
351* Bending, rolling, shaping machinery
3510 Bending, rolling, shaping machinery, unspecified
3511 Bending, crimping machines
3512 Shearing machines
3513 Rolling mills, rolling, calendering machinery
3519 Bending, rolling, shaping machinery, n.e.c.
352* Boring, drilling, planing, milling machinery
3520 Boring, drilling, planing, milling machinery, unspecified
3521 Drills--stationary
3522 Planing machines
3523 Milling machines
3524 Reaming machines
3529 Boring, drilling, planing, milling machinery, n.e.c.
353* Extruding, injecting, forming, molding machinery
3530 Extruding, injecting, forming, molding machinery, unspecified
3531 Casting machinery
3532 Extruding machinery
3533 Forging machinery
3534 Plastic injection molding machinery
3539 Extruding, injecting, forming, molding machinery, n.e.c.
354* Grinding, polishing machinery
3540 Grinding, polishing machinery, unspecified
3541 Grinders, abraders
3542 Honing, polishing, lapping machinery
3549 Grinding, polishing machinery, n.e.c.
355* Lathes

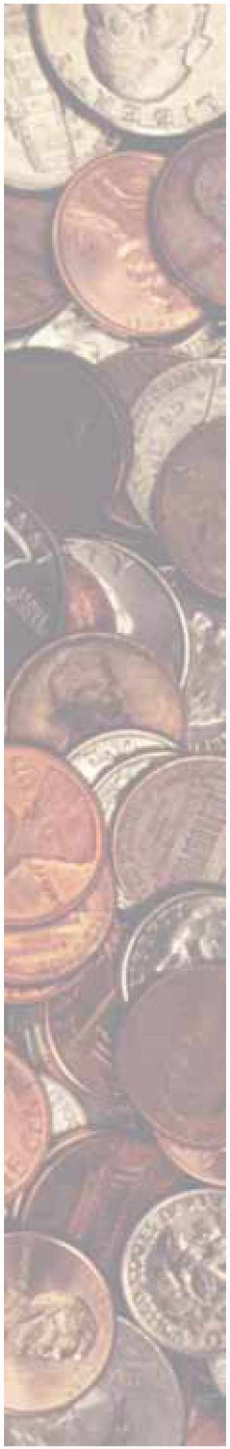


3550 Lathes, unspecified
3551 Metalworking lathes
3552 Woodworking lathes
3559 Lathes, n.e.c.
356* Presses, except printing
3560 Presses, except printing, unspecified
3561 Assembly presses
3562 Brake presses
3563 Punch presses
3569 Presses, except printing, n.e.c.
357* Sawing machinery--stationary
3570 Sawing machinery--stationary, unspecified
3571 Arm saws, radial arm saws
3572 Band saws
3573 Table saws
3579 Sawing machinery--stationary, n.e.c.
358 Threading and tapping machines
359* Other metal, woodworking, and special material machinery
3591 Electrochemical and discharge machinery (EDM)
3592 Laser cutting machinery
3593 Pressure fluid cutting machinery
3594 Spot welding machinery
3599 Metal, woodworking, and special material machinery, n.e.c.
36* Office and business machinery
360 Office and business machinery, unspecified
361* Electronic computers and peripheral equipment
3610 Electronic computers and peripheral equipment, unspecified
3611 Cathode ray tubes (CRTs) and video display terminals (VDTs)
3612 Computers--electronic
3613 Keyboards--computer
3614 Optical scanners
3615 Printers and plotters--computer
3619 Electronic computers and peripheral equipment, n.e.c.
362* Office, banking, and retail machinery
3620 Office and banking machinery, unspecified
3621 Automated teller machines
3622 Calculating machines and cash registers

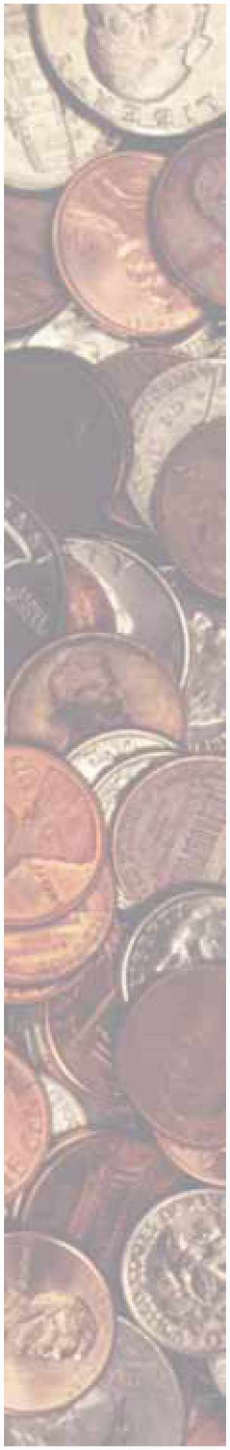




3623 FAX machines
3624 Mailing and metering machines
3625 Photocopiers
3626 Typewriters and word processing equipment
3629 Office and banking machinery, n.e.c.
37* Special process machinery
370 Special process machinery, unspecified
371* Food and beverage processing machinery--specialized
3710 Food and beverage processing machinery--specialized, unspecified
3711 Food slicers
3712 Juice, oil, fat extractors
3713 Meat grinders
3714 Mixers, blenders, whippers--food and beverage
3719 Food and beverage processing machinery--specialized, n.e.c.
372* Medical, surgical, and X-ray machinery and equipment
3720 Medical, surgical, and X-ray machinery and equipment, unspecified
3721 Medical machinery and equipment, except X-ray
3722 X-ray, magnetic resonance imaging (MRIs), and fluoroscope machinery and equipment
3729 Medical, surgical, and X-ray machinery and equipment, n.e.c.
373* Packaging, bottling, wrapping machinery
3730 Packaging, bottling, wrapping machinery, unspecified
3731 Bottling, canning, filling machinery
3732 Packaging, wrapping, bundling machinery
3733 Product labeling machinery
3734 Sealing, stapling machinery
3739 Packaging, bottling, wrapping machinery, n.e.c.
374* Paper production machinery
3740 Paper production machinery, unspecified
3741 Calendars/supercalendars--paper production
3742 Coaters--paper production
3743 Dryers--paper production
3744 Formers--paper production
3745 Slitters, winders--paper production
3746 Washers, bleachers, refiners--paper production
3749 Paper production machinery, n.e.c.
375* Printing machinery and equipment



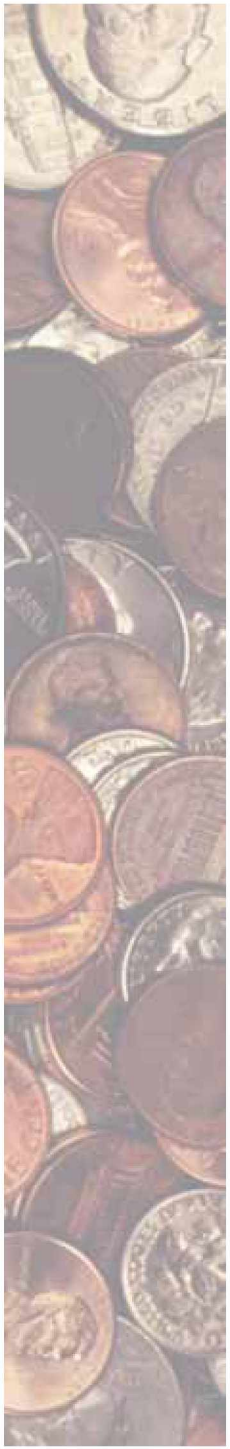
3750 Printing machinery and equipment, unspecified
3751 Bindery machinery
3752 Engraving machinery
3753 Presses--printing
3754 Typesetting machinery
3759 Printing machinery and equipment, n.e.c.
376* Textile, apparel, leather production machinery
3760 Textile, apparel, leather production machinery, unspecified
3761 Dyeing machinery--textile
3762 Knitting machinery
3763 Picking, carding, combing machinery
3764 Sewing, stitching machinery
3765 Spinning machinery
3766 Weaving machinery
3769 Textile, apparel, leather production machinery, n.e.c.
379* Other special process machinery
3790 Other special process machinery, unspecified
3791 Centrifuges
3792 Distilling and rectifying machinery
3793 Dyeing machinery, except textile
3794 Gas liquefying machinery
3795 Paint mixing machinery
3796 Painting, priming, metal coating machinery
3797 Pumps
3799 Special process machinery, n.e.c.
39* Miscellaneous machinery
391* Audio and video equipment
3910 Audio and video equipment, unspecified
3911 Radios, stereos, and other audio equipment
3912 Telephones and communication equipment
3913 Televisions
3914 Video players and recorders--tape and disk
3919 Audio and video equipment, n.e.c.
392 Product assembly machinery, n.e.c.
393 Product testing, inspecting, and diagnostic machinery, n.e.c.
399* Other machinery
3990 Other machinery, unspecified



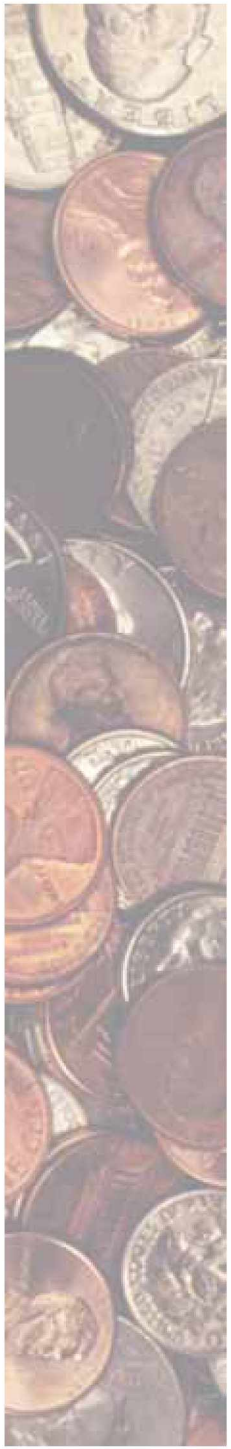
3991 Air compressors
3992 Garbage disposals
3993 Incinerators
3994 Snowblowers
3995 Snow plows
3996 Street sweeping and cleaning machinery
3997 Trash compactors
3998 Vending machines
3999 Machinery, n.e.c.

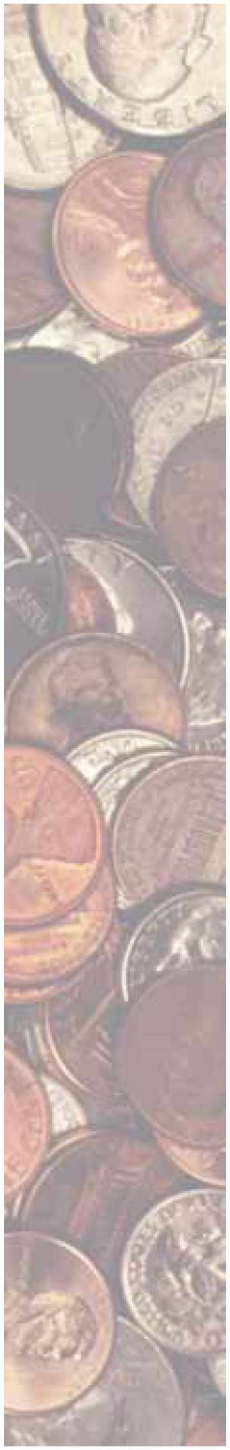
4* PARTS AND MATERIALS

40 Parts and materials, unspecified
41* Building materials--solid elements
410 Building materials, unspecified
411* Bricks, blocks, structural stone
4110 Bricks, blocks, structural stone, unspecified
4111 Bricks and pavers
4112 Concrete blocks, cinder blocks
4113 Structural stones or slabs, n.e.c.
4119 Bricks, blocks, structural stone, n.e.c.
412* Pipes, ducts, tubing
4120 Pipes, ducts, tubing, unspecified
4121 Concrete or clay pipes and conduits
4122 Ducts
4123 Metal pipe, tubing
4124 Pipe fittings
4125 Plastic or rubber pipe and tubing
4129 Pipes, ducts, tubing, n.e.c.
413* Structural metal materials
4130 Structural metal materials, unspecified
4131 Angle irons
4132 Bars, rods, reinforcing bar (rebar)
4133 Beams
4134 Grates
4135 Plates, metal panels
4136 Rails
4137 Sheet metal
4139 Structural metal materials, n.e.c.

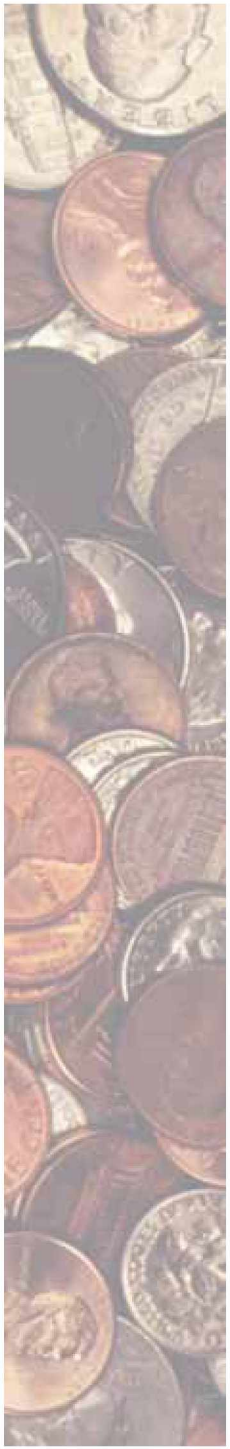


414* Tiles, shingles
4140 Tiles, shingles, unspecified
4141 Ceiling tiles
4142 Ceramic or stone tiles--drain, roof, multipurpose
4143 Roof shingles, except tile
4144 Vinyl floor tiles
4149 Tiles, shingles, n.e.c.
415* Wood, lumber
4150 Wood, lumber, unspecified
4151 Dimensional lumber: 2x4, 2x3, etc.
4152 Plywood, wood paneling; particle, chip, flake board
4153 Wood pieces, trim pieces, n.e.c.
4159 Wood, lumber, n.e.c.
419* Other building materials--solid elements
4190 Other building materials--solid elements, unspecified
4191 Fencing and screening material, n.e.c.
4192 Flashing
4193 Glass, window panes
4194 Gutters, downspouts
4195 Sheet flooring
4196 Siding--aluminum, vinyl
4197 Structural hardware, n.e.c.
4198 Wallboard, drywall
4199 Other building materials--solid elements, n.e.c.
42* Fasteners, connectors, ropes, ties
420 Fasteners, connectors, ropes, ties, unspecified
421* Fasteners
4210 Fasteners, unspecified
4211 Clamps, couplings
4212 Nails, brads, tacks
4213 Nuts, bolts, washers
4214 Rivets
4215 Screws
4216 Spikes
4217 Staples
4219 Fasteners, n.e.c.
422* Ropes, ties, chains

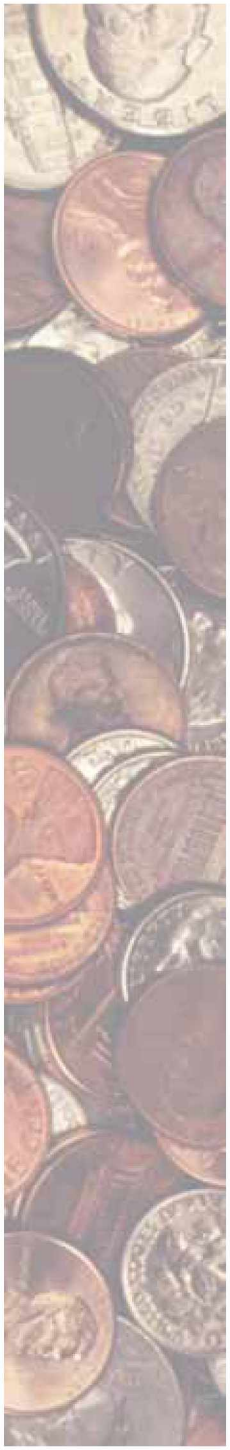




4220 Ropes, ties, chains, unspecified
4221 Bands
4222 Bungee cords
4223 Chains, n.e.c.
4224 Rope, twine, string
4225 Strapping
4226 Wire--nonelectrical
4229 Ropes, ties, chains, n.e.c.
423 Valves, nozzles
429 Fasteners, connectors, ropes, ties, n.e.c.
43* Hoisting accessories
430 Hoisting accessories, unspecified
431 Fixtures, load indicators
432 Hooks, shackles, magnets, clamshells
433 Slings
439 Hoisting accessories, n.e.c.
44* Machine, tool, and electric parts
440 Machine, tool, and electric parts, unspecified
441* Electric parts
4410 Electric parts, unspecified
4411 Electrical wiring
4412 Generators
4413 Magnetic and electrolytic apparatus
4414 Motors
4415 Power lines, transformers, convertors
4416 Relays, rheostats, starters, controls
4417 Switchboards, switches, fuses
4419 Electric parts, n.e.c.
442* Machine and appliance parts
4420 Machine and appliance parts, unspecified
4421 Dies, molds, patterns
4422 Drives--chain, leather, fabric, vee belt
4423 Drums, pulleys, sheaves
4424 Engines, turbines, except vehicle
4425 Friction clutches
4426 Gears
4427 Rollers



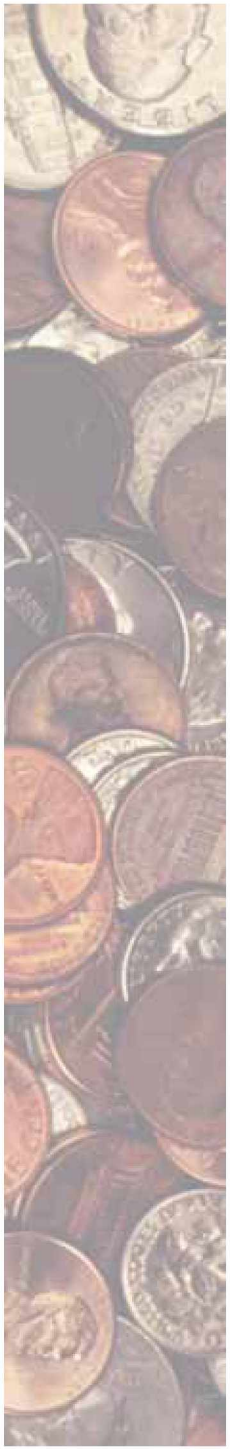
4429 Machine and appliance parts, n.e.c.
443* Tool parts, accessories
4430 Tool parts, accessories, unspecified
4431 Drill bits--unattached
4432 Saw blades--unattached
4439 Tool parts, accessories, n.e.c.
449 Machine, tool, and electric parts, n.e.c.
45* Metal materials--nonstructural
450 Metal materials--nonstructural, unspecified
451 Metal sheets, ingots, bars--nonstructural
452 Molten or hot metals, slag
459 Metal materials--nonstructural, n.e.c.
46* Tars, sealants, caulking, insulating material
460 Tars, sealants, caulking, insulation, unspecified
461 Asphalt, roofing tar
462 Fiberglass insulation
463 Foam caulking, foam insulation
464 Joint compound, patching compounds
465 Plastic, vinyl caulking
466 Sealants, waterproofers, n.e.c.
469 Tars, sealants, caulking, insulation, n.e.c.
47* Tarps and sheeting--nonmetal
470 Tarps and sheeting, nonmetal, unspecified
471 Roofing paper, roofing felt
472 Tarps; plastic, or fabric sheeting
479 Tarps and sheeting, nonmetal, n.e.c.
48* Vehicle and mobile equipment parts
480 Vehicle and mobile equipment parts, unspecified
481* Tires, inner tubes, wheels
4810 Tires, inner tubes, wheels, unspecified
4811 Bike tires
4812 Tire inner tubes
4813 Tires, except bike
4814 Wheels, tire rims
4819 Tires, inner tubes, wheels, n.e.c.
482* Engine parts and accessories
4820 Engine parts and accessories, unspecified



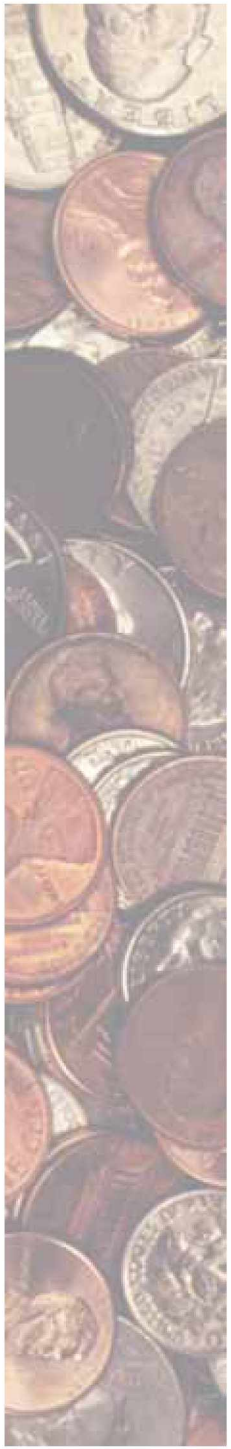
4821 Battery
4822 Belts, hoses
4823 Engine block
4824 Fan
4825 Muffler, exhaust
4826 Radiator
4827 Transmission
4829 Engine parts and accessories, n.e.c.
483 Trailers
484 Windshields, vehicle windows
489 Vehicle and mobile equipment parts, n.e.c.
49 Parts and materials, n.e.c.

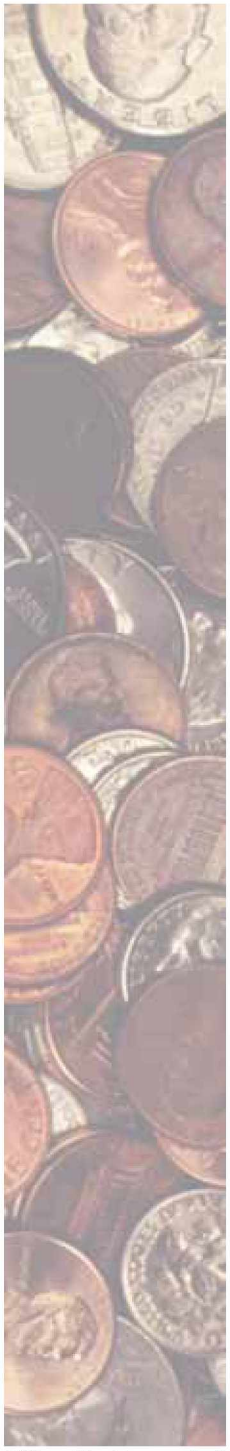
5* PERSONS, PLANTS, ANIMALS, AND MINERALS

51* Animals and animal products
510 Animals, unspecified
511* Animal products--nonfood
5110 Animal products--nonfood, unspecified
5111 Bones, shells
5112 Feathers
5113 Fur, wool
5114 Hides--leather
5119 Animal products--nonfood, n.e.c.
512* Birds and fowl
5120 Birds and fowl, unspecified
5121 Birds, except fowl
5122 Chicken
5123 Ducks
5124 Geese
5125 Turkey
5129 Birds and fowl, n.e.c.
513 Fish, shellfish
514 Insects, arachnids (spiders, ticks, scorpions, etc.)
515* Mammals, except humans
5150 Mammals, unspecified
5151 Cats
5152 Cattle
5153 Dogs



5154 Horses
5155 Rats, rodents
5156 Sheep
5157 Swine
5159 Mammals, n.e.c.
516 Reptiles, snakes
517 Animal waste products, including manure
519 Animals, n.e.c.
52* Food products--fresh or processed
520 Food products, unspecified
521 Bakery products, candy, confections, snack foods
522 Beverages, n.e.c.
523 Dairy products
524 Fruits, nuts, vegetables
525 Grains, grain mill products
526 Meat, poultry
527 Seafood
528 Multiple foods or groceries
529* Other food products--fresh or processed
5291 Fats, oils
5292 Sugar, cocoa, chocolate
5299 Other food products--fresh or processed, n.e.c.
53* Infectious and parasitic agents
530 Infectious and parasitic agents, unspecified
531 Bacteria
532 Fungi
533 Viruses
539 Infectious and parasitic agents, n.e.c.
54* Metallic minerals
540 Metallic minerals, unspecified
541 Metal ores--nonradiating
542* Radiating metals, natural and processed
5420 Radiating metals, natural and processed, unspecified
5421 Plutonium
5422 Radium
5423 Uranium
5429 Radiating metals, natural and processed, n.e.c.

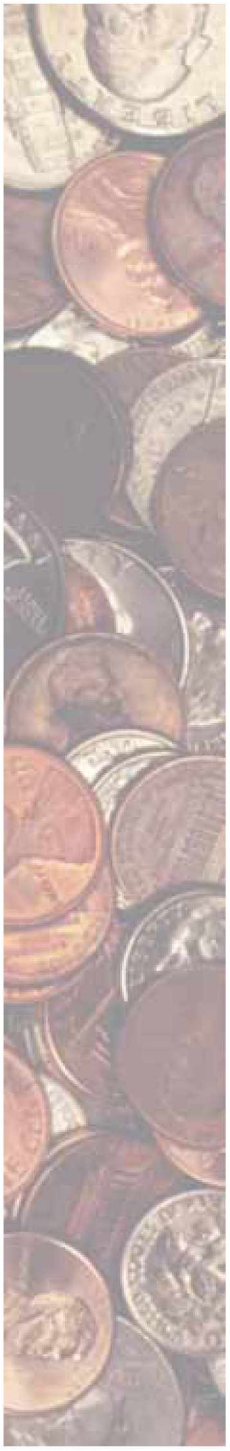


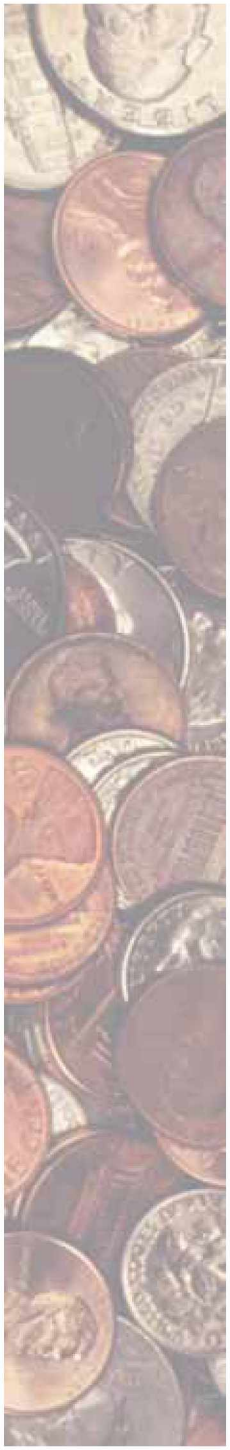


549 Metallic minerals, n.e.c.
55* Nonmetallic minerals, except fuel
550 Nonmetallic minerals, except fuel, unspecified
551 Asbestos
552 Boulders
553 Clay--natural and processed
554 Dirt, earth
555 Rocks, crushed stone
556 Sand, gravel
557 Silica
559 Nonmetallic minerals, except fuel, n.e.c.
56* Person--injured or ill worker
561 Bodily conditions of injured, ill worker
562 Bodily motion or position of injured, ill worker
569 Person--injured or ill worker, n.e.c.
57* Person--other than injured or ill worker
570 Person--other than injured or ill worker, unspecified
571 Bodily fluids or substances of person
572 Co-worker, former co-worker of injured or ill worker
573 Health care patient or resident of health care facility
574 Relative of injured or ill worker
579 Person--other than injured or ill worker, n.e.c.
58* Plants, trees, vegetation--not processed
580 Plants, trees, vegetation, unspecified
581 Cash grain crops
582 Field crops
583 Flowers
584 Houseplants
585 Poison ivy, oak, sumac
586 Shrubs, grasses
587 Trees, logs
589 Plants, trees, vegetation--not processed, n.e.c.
59 Persons, plants, animals, and minerals, n.e.c.

6* STRUCTURES AND SURFACES

60 Structures and surfaces, unspecified
61* Building systems
610 Building system, unspecified

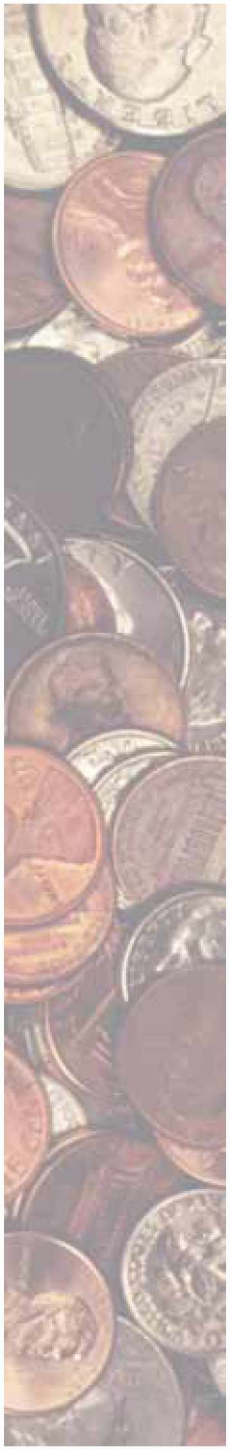




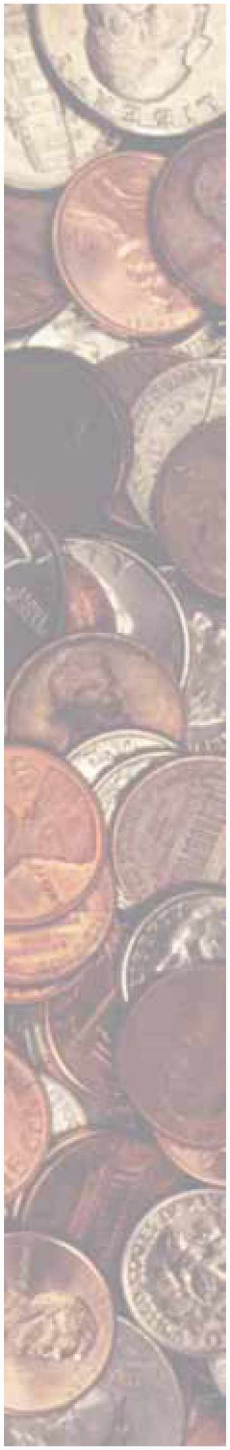
611 Climate control system
612 Plumbing system
619 Building system, n.e.c.
62* Floors, walkways, ground surfaces
620 Floors, walkways, ground surfaces, unspecified
621 Escalators
622* Floors
6220 Floor, unspecified
6221 Floor of building
6222 Floor of elevator
6223 Floor of mine
6224 Floor of scaffold, staging, or temporary work platform
6225 Floor of vehicle
6229 Floor, n.e.c.
623 Ground
624 Sidewalks, paths, outdoor walkways
625* Stairs, steps
6250 Stairs, steps, unspecified
6251 Stairs, steps--indoors
6252 Stairs, steps--outdoors
626 Street, road
627* Surfaces below ground level, n.e.c.
6270 Surfaces below ground level, unspecified
6271 Ditches, channels, trenches, excavations
6279 Surfaces below ground level, n.e.c.
628 Parking lots
629* Other floors, walkways, ground surfaces
6290 Other floors, walkways, ground surfaces, unspecified
6291 Piers, wharfs
6292 Ramps, runways, loading docks
6293 Moving walkways
6299 Floors, walkways, ground surfaces, n.e.c.
63* Other structural elements
630 Other structural elements, unspecified
631 Doors
632 Fences, fence panels
633 Gates

634 Roof
635 Roof trusses
636 Skylights
637 Walls
638 Windows
639 Structural elements, n.e.c.
64* Structures
640 Structures, unspecified
641 Bridges, dams, locks
642 Buildings--office, plant, residential
643 Grandstands, stadia
644* Mines, caves, tunnels
6440 Mines, caves, tunnels, unspecified
6441 Mines, mine tunnels
6442 Pedestrian tunnels
6443 Sewers, manholes, storm drains
6444 Subway and train tunnels
6449 Mines, caves, tunnels, n.e.c.
645 Pools
646* Scaffolds, staging
6460 Scaffolds--staging, unspecified
6461 Scaffolds--improvised staging
6462 Scaffolds--selfsupporting staging
6463 Scaffolds--staging supported by structure or other means
6464 Scaffolds--suspended staging
6469 Scaffolds--staging, n.e.c.
647 Towers, poles
648* Other structures
6480 Other structures, unspecified
6481 Guardrails, road dividers
6482 Hydrants
6483 Wells
6489 Structures, n.e.c.
69 Structures and surfaces, n.e.c.

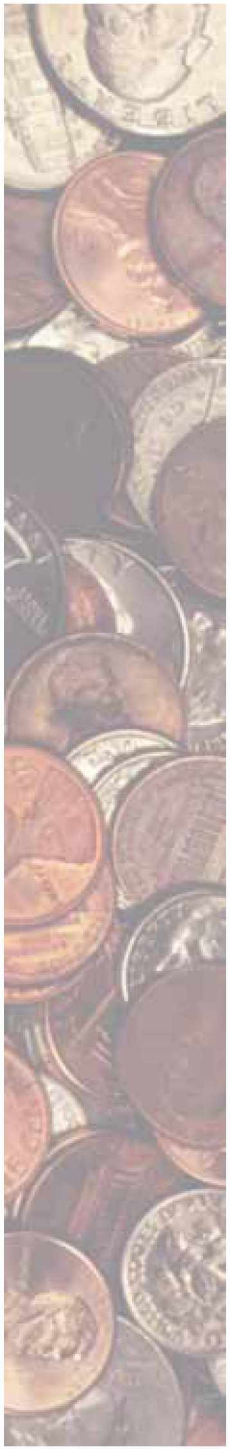
7* TOOLS, INSTRUMENTS, AND EQUIPMENT
70 Tools, instruments, and equipment, unspecified
71* Handtools--nonpowered



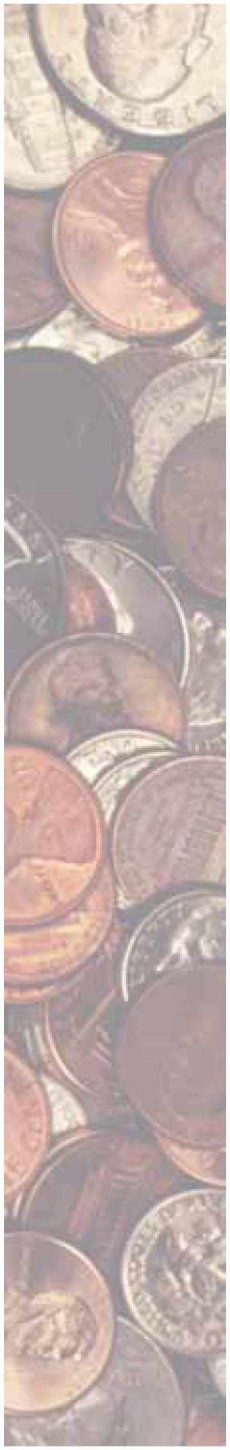
710 Handtools--nonpowered, unspecified
711* Boring handtools--nonpowered
7110 Boring handtools--nonpowered, unspecified
7111 Augers
7112 Braces
7113 Drills
7119 Boring handtools--nonpowered, n.e.c.
712* Cutting handtools--nonpowered
7120 Cutting handtools--nonpowered, unspecified
7121 Axes, hatchets
7122 Bolt cutters
7123 Chisels
7124 Knives
7125 Saws
7126 Scissors, snips, shears
7129 Cutting handtools--nonpowered, n.e.c.
713* Digging handtools--nonpowered
7130 Digging handtools--nonpowered, unspecified
7131 Hoes
7132 Picks
7133 Shovels
7134 Trowels
7139 Digging handtools--nonpowered, n.e.c.
714* Gripping handtools--nonpowered
7140 Gripping handtools--nonpowered, unspecified
7141 Pliers, tongs
7142 Vises, clamps
7149 Gripping handtools--nonpowered, n.e.c.
715* Measuring handtools--nonpowered
7150 Measuring handtools--nonpowered, unspecified
7151 Calipers, micrometers
7152 Dividers
7153 Gauges
7154 Levels
7155 Plumb bobs
7156 Rulers, tape measures
7157 Squares



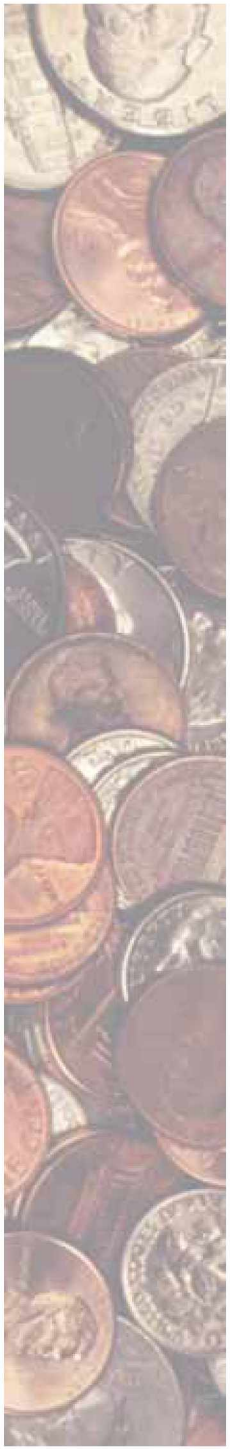
7159 Measuring handtools--nonpowered, n.e.c.
716* Striking and nailing handtools--nonpowered
7160 Striking handtools--nonpowered, unspecified
7161 Hammers
7162 Mallets
7163 Punches, counterpunches, countersinks
7164 Sledges
7169 Striking handtools--nonpowered, n.e.c.
717* Surfacing handtools--nonpowered
7170 Surfacing handtools--nonpowered, unspecified
7171 Files
7172 Planes
7173 Sanders
7174 Sharpening stones and wheels
7179 Surfacing handtools--nonpowered, n.e.c.
718* Turning handtools--nonpowered
7180 Turning handtools--nonpowered, unspecified
7181 Screwdrivers
7182 Wrenches
7189 Turning handtools--nonpowered, n.e.c.
719* Other handtools--nonpowered
7190 Other handtools--nonpowered, unspecified
7191 Brooms, mops, and other cleaning tools
7192 Crowbars
7193 Pitchforks, sading forks
7194 Rakes
7195 Stapling tools--nonpowered
7199 Handtools--nonpowered, n.e.c.
72* Handtools--powered
720 Handtools--powered, unspecified
721* Boring handtools--powered
7210 Boring handtools--powered, unspecified
7211 Augers--powered
7212 Braces--powered
7213 Drills--powered
7214 Routers and molders--powered
7219 Boring handtools--powered, n.e.c



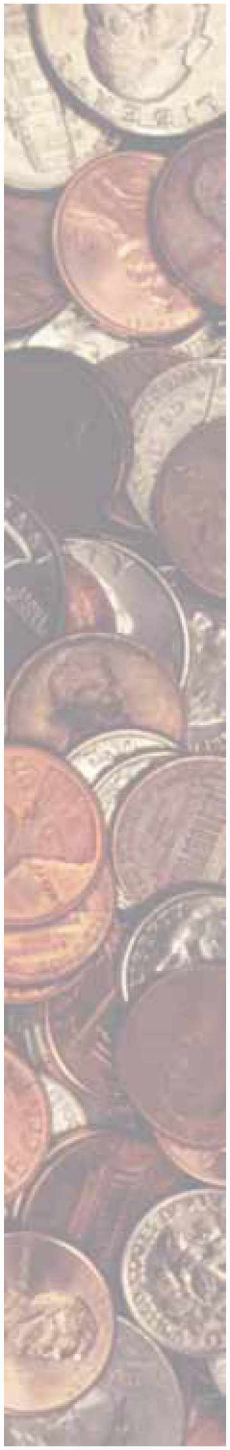
722* Cutting handtools--powered
7220 Cutting handtools--powered, unspecified
7221 Chainsaws--powered
7222 Chisels--powered
7223 Knives--powered
7224 Saws--powered, except chainsaws
7229 Cutting handtools--powered, n.e.c.
723* Striking and nailing handtools--powered
7230 Striking handtools--powered, unspecified
7231 Hammers--powered
7232 Jackhammers--powered
7233 Punches--powered
7234 Riveters--powered
7239 Striking handtools--powered, n.e.c.
724* Surfacing handtools--powered
7240 Surfacing handtools--powered, unspecified
7241 Buffers, polishers, waxers--powered
7242 Hand grinders--powered
7243 Sanders--powered
7244 Sandblasters--powered
7249 Surfacing handtools--powered, n.e.c.
725* Turning handtools--powered
7250 Turning handtools--powered, unspecified
7251 Bolt setters--powered
7252 Impact wrenches--powered
7253 Screwdrivers--powered
7259 Turning handtools--powered, n.e.c.
726* Welding and heating handtools--powered
7260 Welding and heating handtools--powered, unspecified
7261 Blow torches
7262 Soldering irons--powered
7263 Welding torches--powered
7269 Welding and heating handtools--powered, n.e.c.
729* Other handtools--powered
7290 Other handtools--powered, unspecified
7291 Nail guns--powered
7293 Scrubbers--powered



7294 Sprayers--paint
7295 Stapling tools--electric or pneumatic
7299 Handtools--powered, n.e.c.
73* Handtools--power not determined
730 Handtools--power not determined, unspecified
731* Boring handtools--power not determined
7310 Boring handtools--power not determined, unspecified
7311 Augers--power not determined
7312 Braces--power not determined
7313 Drills--power not determined
7319 Boring handtools--power not determined, n.e.c.
732* Cutting handtools--power not determined
7320 Cutting handtools--power not determined, unspecified
7321 Chisels--power not determined
7322 Knives--power not determined
7323 Saws--power not determined
7329 Cutting handtools--power not determined, n.e.c.
733* Striking and nailing handtools--power not determined
7330 Striking and nailing handtools--power not determined, unspecified
7331 Hammers--power not determined
7332 Punches--power not determined
7339 Striking and nailing handtools--power not determined, n.e.c.
734* Surfacing handtools--power not determined
7340 Surfacing handtools--power not determined, unspecified
7341 Sanders--power not determined
7349 Surfacing handtools--power not determined, n.e.c.
735* Turning handtools--power not determined
7350 Turning handtools--power not determined, unspecified
7351 Screwdrivers--power not determined
7352 Wrenches--power not determined
7359 Turning handtools--power not determined, n.e.c.
739* Other handtools--power not determined
7391 Staplers--power not determined
7399 Handtools--power not determined, n.e.c.
74* Ladders
740 Ladders, unspecified
741 Ladders--fixed



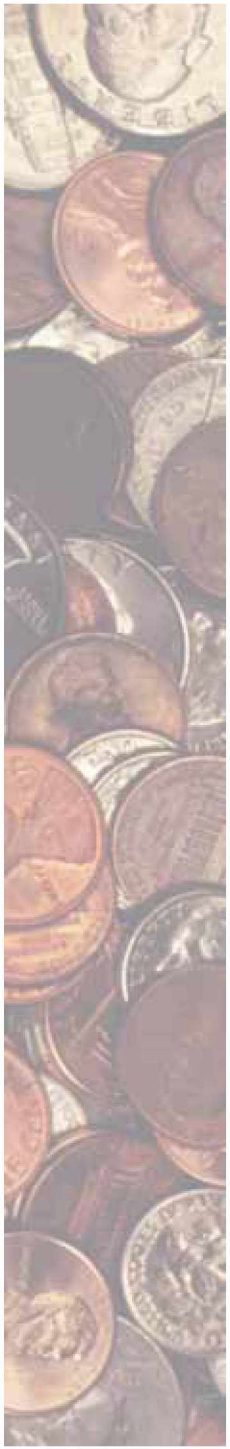
742* Ladders--movable
7420 Movable ladders, unspecified
7421 Extension ladders
7422 Step ladders
7423 Straight ladders
7424 Truck mounted ladders, aerial ladder trams
7429 Movable ladders, n.e.c.
749 Ladders, n.e.c.
75* Medical and surgical instruments
750 Medical and surgical instruments, unspecified
751 Needles and syringes
752 Scalpels
759 Medical and surgical instruments, n.e.c.
76* Photographic equipment
760 Photographic equipment, unspecified
761 Cameras--still and motion picture
762 Photographic paper and cloth
763 Projectors--still and motion picture
764 Tripods, stands
769 Photographic equipment, n.e.c.
77* Protective equipment, except clothing
770 Protective equipment, except clothing, unspecified
771 Dust masks
772 Earplugs and hearing protectors
773 Face shields, welding masks
774 Hard hats
775 Lifelines, lanyards, safety belts or harnesses
776 Respirators
777 Safety glasses or goggles
779 Protective equipment, except clothing, n.e.c.
78* Recreation and athletic equipment
780 Recreation and athletic equipment, unspecified
781 Camping equipment
782 Gymnasium and exercise equipment
783 Playground equipment
784 Riding goods and equipment
785 Snow skiing goods and equipment



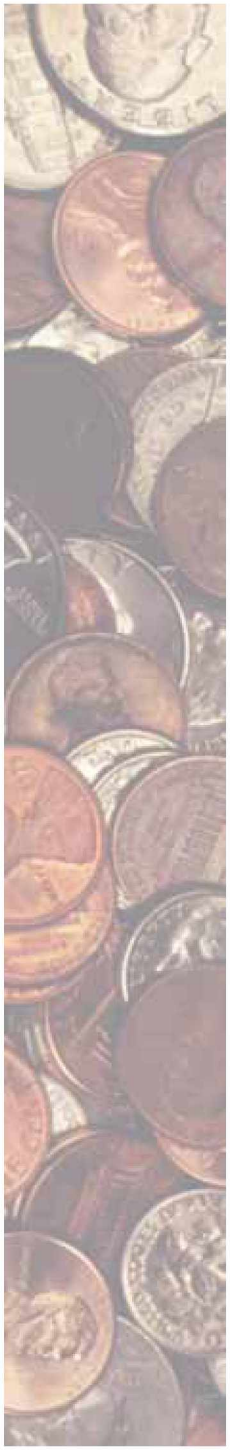
786 Water sports equipment
789 Recreation and athletic equipment, n.e.c.
79* Other tools, instruments, and equipment
791 Clocks
792 Cooking and eating utensils, except knives
793* Firearms
7930 Firearm, unspecified
7931 Pistol, handgun, revolver
7932 Rifle
7933 Shotgun
7939 Firearm, n.e.c.
794 Health care and orthopedic equipment, n.e.c.
795* Musical instruments
7950 Musical instrument, unspecified
7951 Pianos
7959 Other musical instruments
796* Sewing notions, n.e.c
7960 Sewing notions, unspecified
7961 Fabric pins, safety pins
7962 Sewing needles
7969 Sewing notions, n.e.c.
797 Wheelchairs
798* Writing, drawing, and art supplies.
7980 Writing, drawing, and art supplies, unspecified
7981 Art supplies and materials, except paint
7982 Chalk, crayons, marking devices
7983 Pens and pencils
7989 Writing, drawing, and art supplies, n.e.c.
799 Tools, instruments, and equipment, n.e.c

8* VEHICLES

80 Vehicle, unspecified
81* Air vehicle
810 Aircraft, unspecified
811* Aircraft--powered fixed wing
8110 Aircraft--powered fixed wing, unspecified
8111 Jet
8112 Propeller-driven aircraft
8119 Aircraft--powered fixed wing, n.e.c.



812* Aircraft--powered rotary wing
8120 Aircraft--rotary wing, unspecified
8121 Helicopter
8122 Hovercraft
8129 Aircraft--rotary wing, n.e.c.
813* Aircraft--nonpowered
8130 Aircraft--nonpowered, unspecified
8131 Glider, nonpowered
8132 Parachute
8139 Aircraft--nonpowered, n.e.c.
819 Aircraft, n.e.c.
82* Highway vehicle, motorized
820 Highway vehicle, unspecified
821 Automobile
822 Bus
823 Motorcycle, moped
824 Motor home, recreational vehicle
825* Truck
8250 Truck, unspecified
8251 Delivery truck
8252 Dump truck
8253 Pickup truck
8254 Semitrailer, tractor trailer, trailer truck
8259 Truck, n.e.c.
826 Van--passenger or light delivery
829 Highway vehicle, motorized, n.e.c.
83* Highway vehicle, nonmotorized
830 Highway vehicle, nonmotorized, unspecified
831* Animal or human powered vehicle
8311 Horse drawn carriage
8312 Bicycle
8319 Animal or human powered vehicle, n.e.c.
839 Highway vehicle, nonmotorized, n.e.c.
84* Offroad vehicle, nonindustrial
840 Offroad vehicle, nonindustrial, unspecified
841 All terrain vehicle (ATV)
842 Golf cart, powered

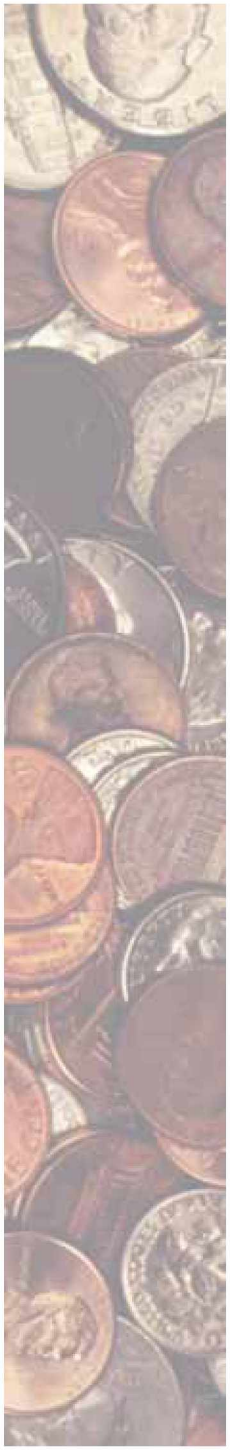


843 Snowmobile
849 Offroad vehicle, nonindustrial, n.e.c.
85* Plant and industrial powered vehicles, tractors
850 Plant and industrial powered vehicles, unspecified
851* Forklift
8510 Forklift, unspecified
8511 Counterbalance rider--high lift
8512 Hand/rider forklift truck--motorized
8513 Order picker high lift truck
8514 Pallet lift truck--motorized
8515 Platform lift truck--high or low lift
8516 Reach rider lift truck
8517 Single side loader rider truck
8518 Straddle rider lift truck
8519 Forklift, n.e.c.
852* Powered industrial carrier, except forklifts
8520 Powered industrial carrier, unspecified
8521 Container carrier
8522 Lumber carrier
8523 Stacker carrier
8524 Straddle carrier
8529 Powered industrial carrier, n.e.c.
853 Tractor
859 Plant and industrial powered vehicle, n.e.c.
86* Plant and industrial vehicle--nonppowered
860 Plant and industrial vehicle--nonpowered, unspecified
861 Cart, dolly, handtruck
862 Wheelbarrow
869 Plant and industrial vehicle--nonpowered, n.e.c.
87* Rail vehicle
870 Rail vehicle, unspecified
871 Amusement park rail vehicle
872 Streetcar, trolley
873 Subway
874 Train
879 Rail vehicle, n.e.c.
88* Water vehicle

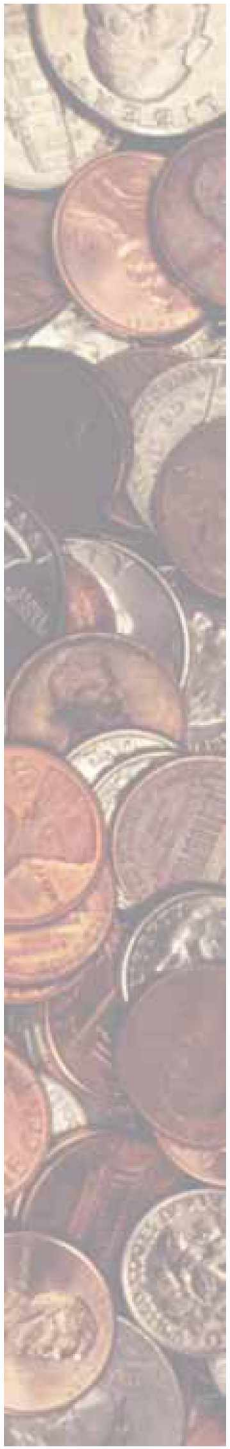
880 Water vehicle, unspecified
881 Barge
882 Canoe, kayak, rowboat, raft
883 Jet skis
884 Motorboat, yachts
885 Sailboat, sailing ship
886 Ships--other than sail powered
887 Tugboat, commercial fishing boat
889 Water vehicle, n.e.c.
89 Vehicles, n.e.c.

9* OTHER SOURCES

91* Ammunition
910 Ammunition, unspecified
911 Bullets
912 Explosive devices
913 Pellets
919 Ammunition, n.e.c.
92* Apparel and textiles
920 Apparel and textiles, unspecified
921* Clothing and shoes
9210 Clothing, unspecified
9211 Belts, gloves, neckties, scarves
9212 Blouses, shirts, dresses, trousers, skirts
9213 Hats, caps
9214 Shoes, boots, slippers, sandals
9215 Suits, coats, jackets
9219 Clothing, n.e.c.
922* Eye glasses, jewelry, and watches
9221 Eye glasses, sunglasses
9222 Jewelry
9223 Watches
923* Textile products
9230 Textile products, unspecified
9231 Fabric
9232 Yarn, thread
9239 Textile products, n.e.c.
924 Laundry



929 Apparel and textiles, n.e.c.
93* Atmospheric and environmental conditions
930 Atmospheric and environmental conditions, unspecified
931* Air pressure
9310 Air pressure, unspecified
9311 High pressure
9312 Low pressure
932 Avalanche, mud slide
933 Earthquake
934* Fire, flame, smoke
9340 Fire, flame, smoke, unspecified
9341 Fire, flame
9342 Smoke, fire gases
935 Flood
936* Temperature extremes--environmental
9360 Temperature extremes--environmental, unspecified
9361 Cold--environmental
9362 Heat--environmental
937* Weather and atmospheric conditions
9370 Weather and atmospheric conditions, unspecified
9371 Fog
9372 High winds, gusts
9373 Ice, sleet, snow
9374 Lightning
9375 Rain
9376 Smog
9377 Tornado, hurricane. typhoon
9379 Weather and atmospheric conditions, n.e.c.
939* Other environmental conditions
9391 Noise
9392 Sun
9399 Environmental conditions, n.e.c.
94* Paper, books, magazines
940 Paper, books, magazines, unspecified
941 Books, notebooks, magazines, catalogues
942 Paper, sheets
949 Paper, books, magazines, n.e.c.

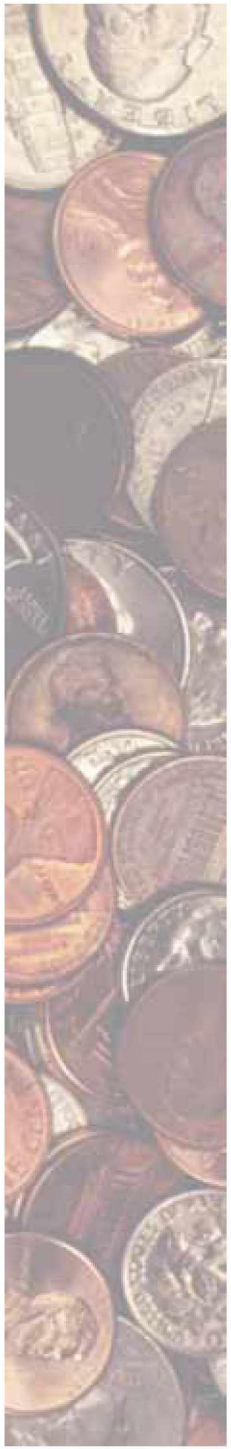


95* Scrap, waste, debris
950 Scrap, waste, debris, unspecified
951* Chips, particles, splinters
9510 Chips, particles, splinters, unspecified
9511 Dirt particles
9512 Glass chips or fibers
9513 Metal chips, particles
9514 Wood chips, sawdust
9519 Chips, particles, splinters, n.e.c.
952 Sewage
953 Trash, garbage
959 Scrap, waste, debris, n.e.c.
96* Steam, vapors, liquids, n.e.c.
961 Steam, vapors--nonchemical
962* Liquids
9620 Liquids, unspecified
9621 Water
9629 Liquids, n.e.c.
98 Other sources, n.e.c.

9999 Nonclassifiable

* - Asterisks indicate division, major group, or group titles.

Source: U. S. Department of Labor, Bureau of Labor Statistics at.www.bls.gov/iif/oshoiics.htm



Appendix II

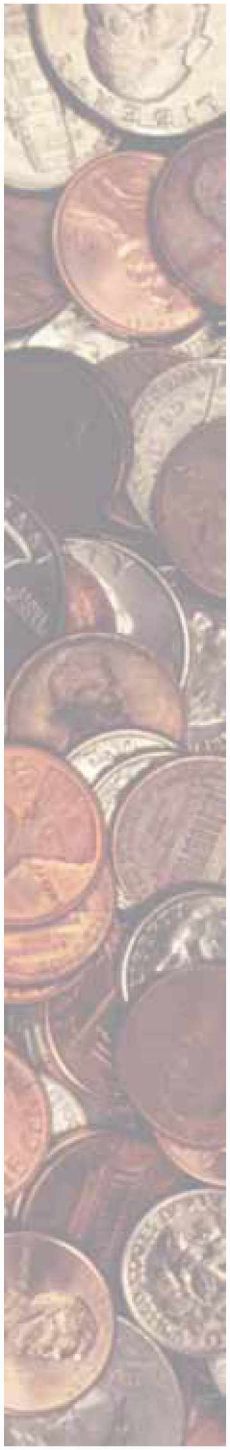
1990 Bureau of the Census Occupational (BOC) Classification System

MANAGERIAL AND PROFESSIONAL SPECIALTY OCCUPATIONS

Census Code	Occupation
	Executive, Administrative, and Managerial Occupations
003	Legislators
004	Chief executives and general administrators, public administration
005	Administrators and officials, public administration
006	Administrators, protective services
007	Financial managers
008	Personnel and labor relations managers
009	Purchasing managers
013	Managers, marketing, advertising, and public relations
014	Administrators, education and related fields
015	Managers, medicine and health
016	Postmasters and mail superintendents
017	Managers, food serving and lodging establishments
018	Managers, properties and real estate
019	Funeral directors
021	Managers, service organizations, n.e.c.
022	Managers and administrators, n.e.c.
	Management Related Occupations
023	Accountants and auditors
024	Underwriters
025	Other financial officers
026	Management analysts
027	Personnel, training, and labor relations specialists
028	Purchasing agents and buyers, farm products
029	Buyers, wholesale and retail trade except farm products
033	Purchasing agents and buyers, n.e.c.
034	Business and promotion agents
035	Construction inspectors
036	Inspectors and compliance officers, except construction
037	Management related occupations, n.e.c.

PROFESSIONAL SPECIALTY OCCUPATIONS

	Engineers, Architects, and Surveyors
043	Architects
	Engineers
044	Aerospace
045	Metallurgical and materials
046	Mining
047	Petroleum
048	Chemical
049	Nuclear
053	Civil
054	Agricultural
055	Electrical and electronic
056	Industrial
057	Mechanical
058	Marine and naval architects
059	Engineers, n.e.c.
063	Surveyors and mapping scientists



Mathematical and Computer Scientists

064 Computer systems analysts and scientists
065 Operations and systems researchers and analysts
066 Actuaries
067 Statisticians
068 Mathematical scientists, n.e.c.

Natural Scientists

069 Physicists and astronomers
073 Chemists, except biochemists
074 Atmospheric and space scientists
075 Geologists and geodesists
076 Physical scientists, n.e.c.
077 Agricultural and food scientists
078 Biological and life scientists
079 Forestry and conservation scientists
083 Medical scientists

Health Diagnosing Occupations

084 Physicians
085 Dentists
086 Veterinarians
087 Optometrists
088 Podiatrists
089 Health diagnosing practitioners, n.e.c.

Health Assessment and Treating Occupations

095 Registered nurses
096 Pharmacists
097 Dietitians

Therapists

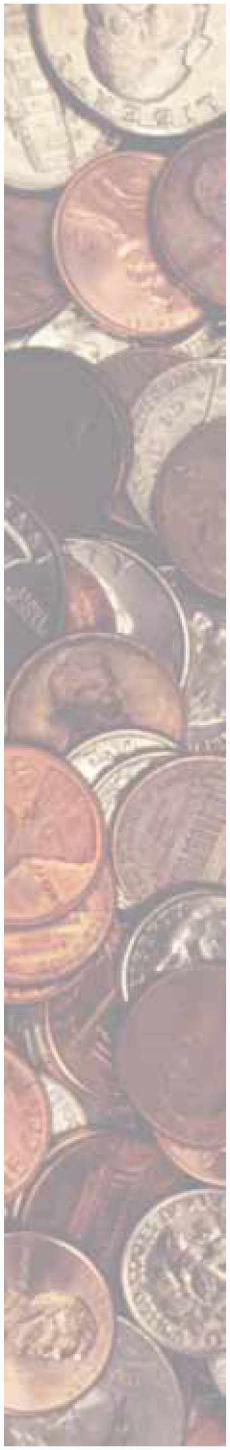
098 Respiratory therapists
099 Occupational therapists
103 Physical therapists
104 Speech therapists
105 Therapists, n.e.c.
106 Physicians' assistants

Teachers, Postsecondary

113 Earth, environmental, and marine science teachers
114 Biological science teachers
115 Chemistry teachers
116 Physics teachers
117 Natural science teachers, n.e.c.
118 Psychology teachers
119 Economics teachers
123 History teachers
124 Political science teachers
125 Sociology teachers
126 Social science teachers, n.e.c.
127 Engineering teachers
128 Mathematical science teachers
129 Computer science teachers
133 Medical science teachers
134 Health specialties teachers
135 Business, commerce, and marketing teachers
136 Agriculture and forestry teachers
137 Art, drama, and music teachers
138 Physical education teachers
139 Education teachers
143 English teachers
144 Foreign language teachers
145 Law teachers
146 Social work teachers
147 Theology teachers
148 Trade and industrial teachers
149 Home economics teachers
153 Teachers, postsecondary, n.e.c.
154 Postsecondary teachers, subject not specified

Teachers, Except Postsecondary

155 Teachers, prekindergarten and kindergarten



156 Teachers, elementary school
157 Teachers, secondary school
158 Teachers, special education
159 Teachers, n.e.c.
163 Counselors, educational and vocational

Librarians, Archivists, and Curators

164 Librarians
165 Archivists and curators

Social Scientists and Urban Planners

166 Economists
167 Psychologists
168 Sociologists
169 Social scientists, n.e.c.
173 Urban planners

Social, Recreation, and Religious Workers

174 Social workers
175 Recreation workers
176 Clergy
177 Religious workers, n.e.c.

Lawyers and Judges

178 Lawyers
179 Judges

Writers, Artists, Entertainers, and Athletes

183 Authors
184 Technical writers
185 Designers
186 Musicians and composers
187 Actors and directors
188 Painters, sculptors, craft-artists, and artist printmakers
189 Photographers
193 Dancers
194 Artists, performers, and related workers, n.e.c.
195 Editors and reporters
197 Public relations specialists
198 Announcers
199 Athletes

TECHNICAL, SALES AND ADMINISTRATIVE SUPPORT OCCUPATIONS

Technicians and Related Support occupations

Health Technologists and Technicians

203 Clinical laboratory technologists and technicians
204 Dental hygienists
205 Health record technologists and technicians
206 Radiologic technicians
207 Licensed practical nurses
208 Health technologists and technicians, n.e.c.

Technologists and Technicians, Except Health Engineering and Related Technologists and Technicians

213 Electrical and electronic technicians
214 Industrial engineering technicians
215 Mechanical engineering technicians
216 Engineering technicians, n.e.c.
217 Drafting occupations
218 Surveying and mapping technicians

Science Technicians

223 Biological technicians
224 Chemical technicians
225 Science technicians

Technicians: Except Health, Engineering and Science

226 Airplane pilots and navigators
227 Air traffic controllers
228 Broadcast equipment operators
229 Computer programmers
233 Tool programmers, numerical control

234 Legal assistants
235 Technicians, n.e.c.

Sales Occupations

243 Supervisors and proprietors, sales occupations

Sales Representatives, Finance and Business Services

253 Insurance sales occupations
254 Real estate sales occupations
255 Securities and financial services sales occupations
256 Advertising and related sales occupations
257 Sales occupations, other business services

Sales Representatives, Commodities Except Retail

258 Sales engineers
259 Sales representatives, mining, manufacturing, and wholesale

Sales Workers, Retail and Personal Services

263 Sales workers, motor vehicles and boats
264 Sales workers, apparel
265 Sales workers, shoes
266 Sales workers, furniture and home furnishings
267 Sales workers; radio, TV, hi-fi, and appliances
268 Sales workers, hardware and building supplies
269 Sales workers, parts
274 Sales workers, other commodities
275 Sales counter clerks
276 Cashiers
277 Street and door-to-door sales workers
278 News vendors

Sales Related Occupations

283 Demonstrators, promoters and models, sales
284 Auctioneers
285 Sales support occupations, n.e.c.

Administrative Support Occupations, Including Clerical

Supervisors, Administrative Support Occupations

303 Supervisors, general office
304 Supervisors, computer equipment operators
305 Supervisors, financial records processing
306 Chief communications operators
307 Supervisors; distribution, scheduling, and adjusting clerks

Computer Equipment Operators

308 Computer operators
309 Peripheral equipment operators

Secretaries, Stenographers, and Typists

313 Secretaries
314 Stenographers
315 Typists

Information Clerks

316 Interviewers
317 Hotel clerks
318 Transportation ticket and reservation agents
319 Receptionists
323 Information clerks, n.e.c.

Records Processing Occupations, Except Financial

325 Classified-ad clerks
326 Correspondence clerks
327 Order clerks

328 Personnel clerks, except payroll and timekeeping
329 Library clerks
335 File clerks
336 Records clerks

Financial Records Processing Occupations

337 Bookkeepers, accounting, and auditing clerks
338 Payroll and timekeeping clerks
339 Billing clerks
343 Cost and rate clerks
344 Billing, posting, and calculating machine operators

Duplicating, Mail and Other Office Machine Operators

345 Duplicating machine operators
346 Mail preparing and paper handling machine operators
347 Office machine operators, n.e.c.

Communications Equipment Operators

348 Telephone operators
353 Communications equipment operators, n.e.c.

Mail and Message Distributing Occupations

354 Postal clerks, exc. mail carriers
355 Mail carriers, postal service
356 Mail clerks, exc. postal service
357 Messengers

Material Recording, Scheduling, and Distributing Clerks

359 Dispatchers
363 Production coordinators
364 Traffic, shipping, and receiving clerks
365 Stock and inventory clerks
366 Motor readers
368 Weighers, measurers, checkers and samplers
373 Expediters
374 Material recording, scheduling, and distributing clerks, n.e.c.

Adjusters and Investigators

375 Insurance adjusters, examiners, and investigators
376 Investigators and adjusters except insurance
377 Eligibility clerks, social welfare
378 Bill and account collectors

Miscellaneous Administrative Support Occupations

379 General office clerks
383 Bank tellers
384 Proofreaders
385 Data-entry keyers
386 Statistical clerks
387 Teachers' aides
389 Administrative support occupations, n.e.c.

SERVICE OCCUPATIONS

Private Household Occupations

403 Launderers and ironers
404 Cooks, private household
405 Housekeepers and butlers
406 Child care workers, private household
407 Private household cleaners and servants

Protective Service Occupations

Supervisors Protective Service Occupations

413 Supervisors, firefighting and fire prevention occupations
414 Supervisors, police and detectives
415 Supervisors, guards

Firefighting and Fire Prevention Occupations

416 Fire inspection and fire prevention occupations
417 Firefighting occupations

Police and Detectives

418 Police and detectives, public service
423 Sheriffs, bailiffs, and other law enforcement officers
424 Correctional institution officers

Guards

425 Crossing guards
426 Guards and police, except public service
427 Protective service occupations, n.e.c.

Service Occupations, Except Protective and Household

Food Preparation and Service Occupations

433 Supervisors, food preparation and service occupations
434 Bartenders
435 Waiters and waitresses
436 Cooks
438 Food counter, fountain and related occupations
439 Kitchen workers, food preparation
443 Waiters'/waitresses' assistants
444 Miscellaneous food preparation occupations

Health Service Occupations

445 Dental assistants
446 Health aides, except nursing
447 Nursing aides, orderlies, and attendants

Cleaning and Building Service Occupations, except Household

448 Supervisors cleaning and building service workers
449 Maids and houseman
453 Janitors and cleaners
454 Elevator operators
455 Pest control occupations

Personal Service Occupations

456 Supervisors, personal service occupations
457 Barbers
458 Hairdressers and cosmetologists
459 Attendants, amusement and recreation facilities
461 Guides
462 Ushers
463 Public transportation attendants
464 Baggage porters and bellhops
465 Welfare service aides
466 Family child care providers
467 Early childhood teacher's assistants
468 Child care workers, n.e.c.
469 Personal service occupations, n.e.c.

FARMING, FORESTRY AND FISHING OCCUPATIONS

Farm Operators and Managers

473 Farmers, except horticultural
474 Horticultural specialty farmers
475 Managers, farms, except horticultural
476 Managers, horticultural specialty farms

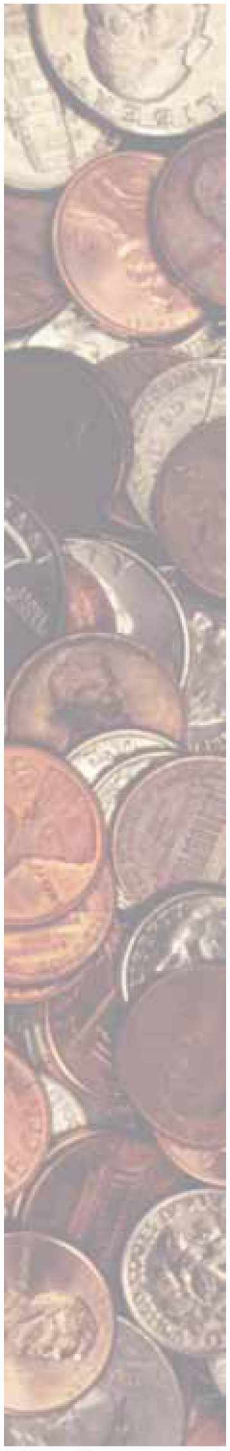
Other Agricultural and Related Occupations

Farm Occupations Except Managerial

477 Supervisors, farm workers
479 Farm workers
483 Marine life cultivation workers
484 Nursery workers

Related Agricultural Occupations

485 Supervisors related agricultural occupations



486 Groundskeepers and gardeners, except farm
487 Animal caretakers, except farm
488 Graders and sorters, agricultural products
489 Inspectors, agricultural products

Forestry and Logging Occupations

494 Supervisors, forestry, and logging workers
495 Forestry workers, except logging
496 Timber cutting and logging occupations

Fishers, Hunters, and Trappers

497 Captains and other officers, fishing vessels
498 Fishers
499 Hunters and trappers

PRECISION PRODUCTION, CRAFT, AND REPAIR OCCUPATIONS

Mechanics and Repairers

503 Supervisors, mechanics and repairers

Mechanics and Repairers, Except Supervisors

Vehicle and Mobile Equipment Mechanics and Repairers

505 Automobile mechanics
506 Automobile mechanic apprentices
507 Bus, truck, and stationary engine mechanics
508 Aircraft engine mechanics
509 Small engine repairers
514 Automobile body and related repairers
515 Aircraft mechanics, exc. engine
516 Heavy equipment mechanics
517 Farm equipment mechanics
518 Industrial machinery repairers
519 Machinery maintenance occupations

Electrical and Electronic Equipment Repairers

523 Electronic repairers, communications and industrial equipment
525 Data processing equipment repairers
526 Household appliance and power tool repairers
527 Telephone line installers and repairers
529 Telephone installers and repairers
533 Miscellaneous electrical and electronic equipment repairers
534 Heating, air conditioning, and refrigeration mechanics

Miscellaneous Mechanics and Repairers

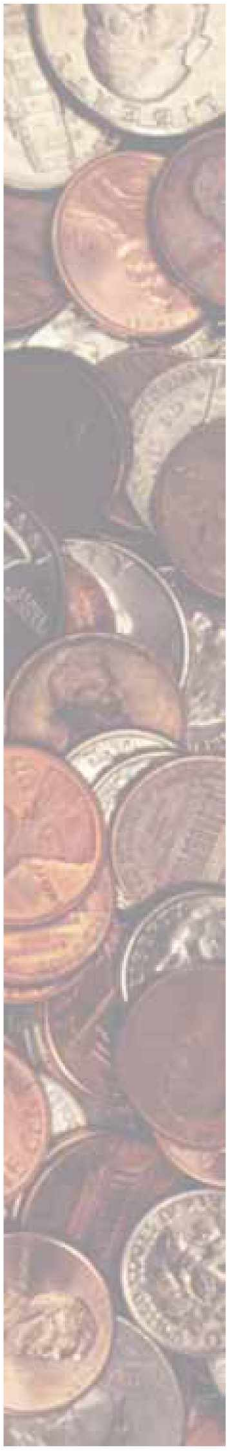
535 Camera, watch, and musical instrument repairers
536 Locksmiths and safe repairers
538 Office machine repairers
539 Mechanical controls and valve repairers
543 Elevator installers and repairers
544 Millwrights
547 Specified mechanics and repairers, n.e.c.
549 Not specified mechanics and repairers

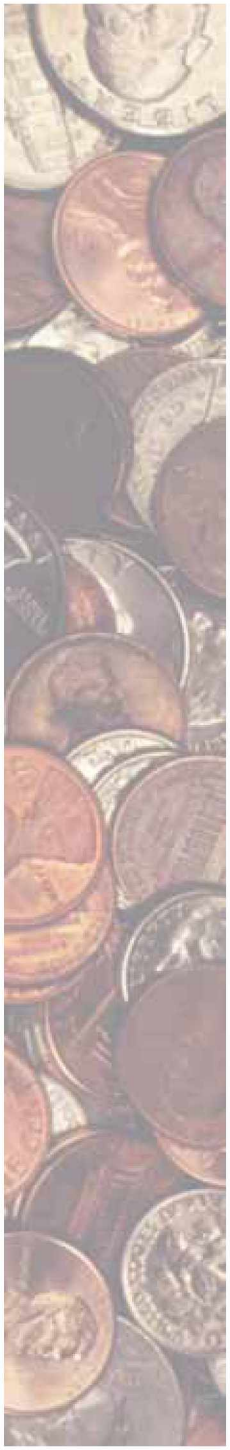
Construction Trades

Supervisors, Construction Occupations

553 Supervisors; brickmasons, stonemasons, and tile setters
554 Supervisors; carpenters and related workers
555 Supervisors; electricians and power transmission installers
556 Supervisors; painters, paperhangers, and plasterers
557 Supervisors; plumbers, pipefitters, and steamfitters
558 Supervisors; n.e.c.

Construction Trades Except Supervisors





563 Brickmasons and stonemasons
564 Brickmason and stonemason apprentices
565 Tile setters, hard and soft
566 Carpet installers
567 Carpenters
569 Carpenter apprentices
573 Drywall installers
575 Electricians
576 Electrician apprentices
577 Electrical power installers and repairers
579 Painters, construction and maintenance
583 Paperhangers
584 Plasterers
585 Plumbers, pipefitters, and steamfitters
587 Plumber, pipefitter, and steamfitter apprentices
588 Concrete and terrazzo finishers
589 Glaziers
593 Insulation workers
594 Paving, surfacing, and tamping equipment operators
595 Roofers
596 Sheetmetal duct installers
597 Structural metal workers
598 Drillers, earth
599 Construction trades, n.e.c.

Extractive Occupations

613 Supervisors, extractive occupations
614 Drillers, oil well
615 Explosives workers
616 Mining machine operators
617 Mining occupations, n.e.c.

Precision Production Occupations

628 Supervisors, production occupations

Precision Metal Working Occupations

634 Tool and die makers
635 Tool and die maker apprentices
636 Precision assemblers, metal
637 Machinists
639 Machinist apprentices
643 Boilermakers
644 Precision grinders, filers, and tool sharpeners
645 Patternmakers and model makers, metal
646 Lay-out workers
647 Precious stones and metals workers (Jewelers)
649 Engravers, metal
653 Sheet metal workers
654 Sheet metal worker apprentices
655 Miscellaneous precision metal workers

Precision Woodworking Occupations

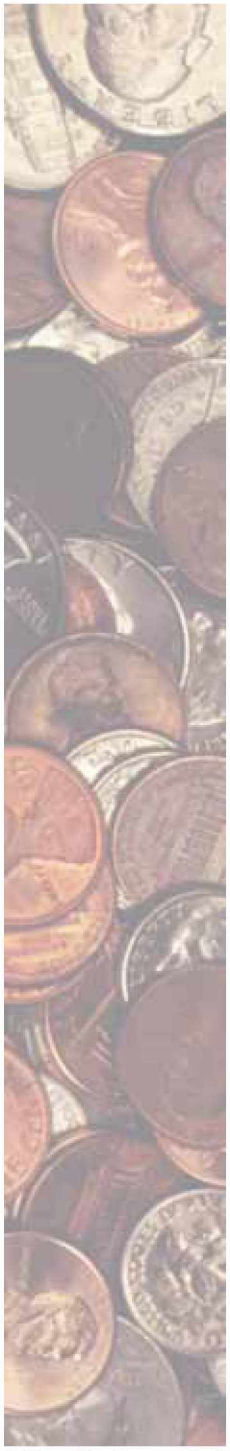
656 Patternmakers and model makers, wood
657 Cabinet makers and bench carpenters
658 Furniture and wood finishers
659 Miscellaneous precision woodworkers

Precision Textile, Apparel, and Furnishings Machine Workers

666 Dressmakers
667 Tailors
668 Upholsterers
669 Shoe repairers
674 Miscellaneous precision apparel and fabric workers

Precision Workers, Assorted Materials

675 Hand molders and shapers, except jewelers
676 Patternmakers, lay-out workers, and cutters
677 Optical goods workers
678 Dental laboratory and medical appliance technicians
679 Bookbinders
683 Electrical and electronic equipment



assemblers
684 Miscellaneous precision workers, n.e.c.

Precision Food Production Occupations

686 Butchers and meat cutters
687 Bakers
688 Food batchmakers

Precision Inspectors, Testers, and Related Workers

689 Inspectors, testers, and graders
693 Adjusters and calibrators

Plant and System Operators

694 Water and sewage treatment plant operators
695 Power plant operators
696 Stationary engineers
699 Miscellaneous plant and system operators

OPERATORS, FABRICATORS, AND LABORERS

Machine Operators, Assemblers, and Inspectors

Machine Operators and Tenders, except Precision

Metal Working and Plastic Working Machine Operators

703 Lathe and turning machine set-up operators
704 Lathe and turning machine operators
705 Milling and planing machine operators
706 Punching and stamping press machine operators
707 Rolling machine operators
708 Drilling and boring machine operators
709 Grinding, abrading, buffing, and polishing machine operators
713 Forging machine operators
714 Numerical control machine operators
715 Miscellaneous metal, plastic, stone, and glass working machine operators
717 Fabricating machine operators, n.e.c.

Metal and Plastic Processing Machine Operators

719 Molding and canting machine operators
723 Metal plating machine operators
724 Heat treating equipment operators
725 Miscellaneous metal and plastic processing machine operators

Woodworking Machine Operators

726 Wood lathe, routing, and planing machine operators
727 Sawing machine operators
728 Shaping and joining machine operators
729 Nailing and tacking machine operators
733 Miscellaneous woodworking machine operators

Printing Machine Operators

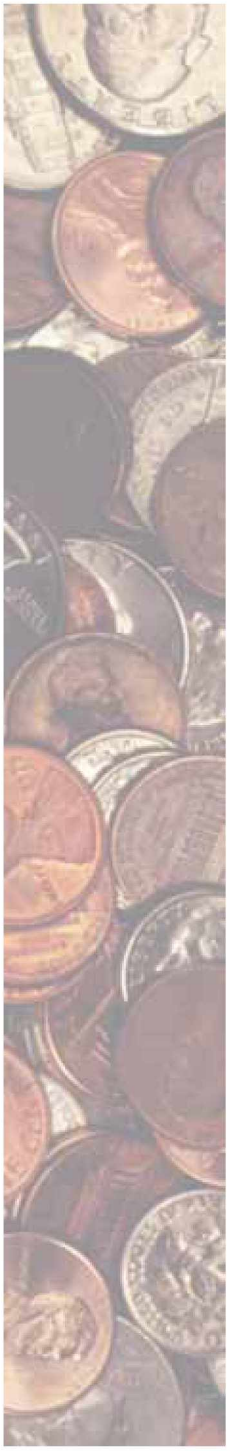
734 Printing press operators
735 Photoengravers and lithographers
736 Typesetters and compositors
737 Miscellaneous printing machine operators

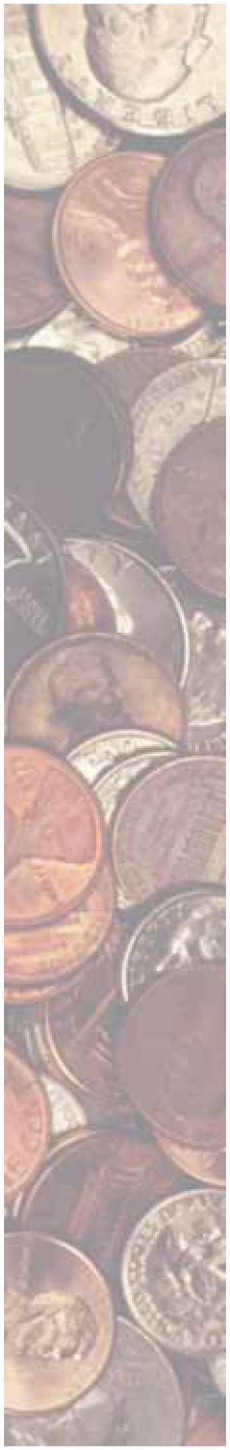
Textile, Apparel, and Furnishings Machine Operators

738 Winding and twisting machine operators
739 Knitting, looping, taping, and weaving machine operators
743 Textile cutting machine operators
744 Textile serving machine operators
745 Shoe machine operators
747 Pressing machine operators
748 Laundering and dry cleaning machine operators
749 Miscellaneous textile machine operators

Machine Operators, Assorted Materials

753 Cementing and gluing machine





operators
754 Packaging and filling machine operator
755 Extruding and forming machine operators
756 Mixing and blending machine operators
757 Separating, filtering, and clarifying machine operators
758 Compressing and compacting machine operators
759 Painting and paint spraying machine operators
763 Roasting and baking machine operators, food
764 Washing, cleaning, and pickling machine operators
765 Folding machine operators
766 Furnace, kiln, and oven operators, exc. food
768 Crushing and grinding machine operators
769 Slicing and cutting machine operators
773 Motion picture projectionists
774 Photographic process machine operators
777 Miscellaneous machine operators, n.e.c.
779 Machine operators, not specified

Fabricators, Assemblers, and Hand Working Occupations

783 Welders and cutters
784 Solderers and brazers
785 Assemblers
786 Hand cutting and trimming occupations
787 Hand molding, casting, and forming occupations
789 Hand painting, coating, and decorating occupations
793 Hand engraving and printing occupations
795 Miscellaneous hand working occupations

Production Inspectors, Testers, Samplers, and Weighers

796 Production inspectors, checkers, and examiners
797 Production testers
798 Production samplers and weighers
799 Graders and sorters, exc. agricultural

Transportation and Material Moving Occupations

Motor Vehicle Operators

803 Supervisors, motor vehicle operators
804 Truck drivers
806 Driver-sales workers
808 Bus drivers
809 Taxicab drivers and chauffeurs
813 Parking lot attendants
814 Motor transportation occupations, n.e.c.

Transportation Occupations, Except Motor Vehicles

Rail Transportation Occupations

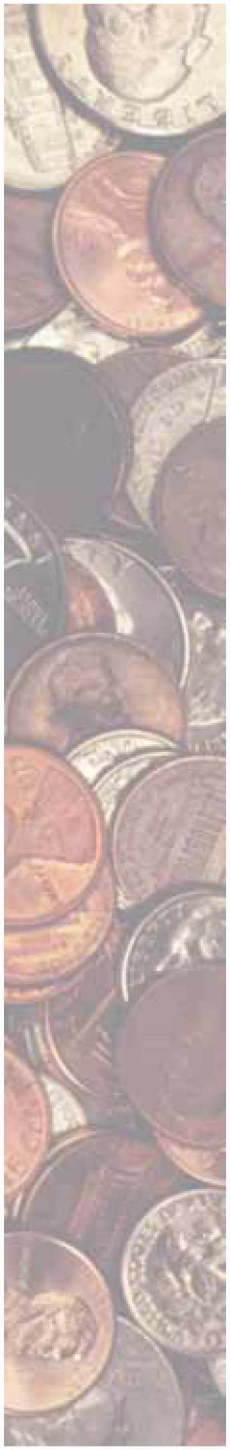
823 Railroad conductors and yardmasters
824 Locomotive operating occupations
825 Railroad brake, signal, and switch operators
826 Rail vehicle operators, n.e.c.

Water Transportation Occupations

828 Ship captains and mates, except fishing boats
829 Sailors and deckhands
833 Marine engineers
834 Bridge, lock, and lighthouse tenders

Material Moving Equipment Operators

843 Supervisors, material moving equipment operators
844 Operating engineers
845 Longshore equipment operators



848 Hoist and winch operators
849 Crane and tower operators
853 Excavating and loading machine operators
855 Grader, dozer, and scraper operators
856 Industrial truck and tractor equipment operators
859 Miscellaneous material moving equipment operators

Handlers, Equipment Cleaners, Helpers, and Laborers

864 Supervisors, handlers, equipment cleaners, and laborers, n.e.c.
865 Helpers, mechanics and repairers

Helpers, Construction and Extractive Occupations

866 Helpers, construction trades
867 Helpers, surveyor
868 Helpers, extractive occupations
869 Construction laborers
874 Production helpers

Freight, Stock, and Material Handlers

875 Garbage collectors
876 Stevedores
877 Stock handlers and baggers
878 Machine feeders and offbearers
883 Freight, stock, and material handlers, n.e.c.
885 Garage and service station related occupations
887 Vehicle washers and equipment cleaners
888 Hand packers and packagers
889 Laborers, except construction

Source: U.S. Department of Commerce, Bureau of Census, 1990 Alphabetical and Classified Indexes of Industries and Occupations

Appendix III

Selected 1990 Bureau of the Census (BOC) Occupation Codes

Code	Occupation Description	Occupation Abbreviation
804	Truck Drivers	Truck drivers
869	Construction Laborers	Construction laborers
473	Farmers, Exc Hort	Farmers, exc horticultural
022	Managers and administrators, n.e.c.	Mgrs/admin, nec
243	Sales Occ Supervisors	Sales occ supervisors
889	Laborers, except construction	Laborers, not construction
479	Farm Workers	Farm workers
226	Airplane pilots and navigators	Pilots/navigators
496	Logging Occupations	Logging occupations
486	Groundskeepers and gardeners, except farm	Groundskeepers

Selected 1987 Standard Industrial Classification (SIC) Major Groups

Industry Code	Industry Description	Industry Abbreviation
4213	Trucking, except local	Trucking, except local
0191	General farms, primarily crop	General farms, primarily crop
2411	Logging	Logging
5411	Grocery stores.	Grocery stores
9221	Police protection	Police protection
4212	Local trucking, without storage	Local trucking, without storage
1611	Highway and street construction, except elevated highways	Highway and street construction
5812	Eating places	Eating places
1761	Roofing, siding, and sheet metal work	Roofing, siding, and sheet metal work
1731	Electrical work	Electrical work

Appendix IV

Abbreviations for 1990 Bureau of the Census (BOC) Occupation Divisions

Occupation Description	Occupation Abbreviation
Managerial and Professional Specialty Occupations	Mgr & Prof Specialty
Technical, Sales, and Administrative Support Occupations	Technical, Sales & Admin Support
Service Occupations	Service
Farming, Forestry and Fishing Occupations	Farming, Forestry & Fishing
Precision Production, Craft and Repair Occupations	Precision Production, Craft & Repair
Operators, Fabricators and Laborers	Operators, Fabricators & Laborers

Abbreviations for 1987 Standard Industrial Classification (SIC) Industry Divisions

Industry Description	Industry Abbreviation
Agriculture, Forestry, and Fishing	Agriculture
Mining (includes oil & gas extraction)	Mining
Construction	Construction
Manufacturing	Manufacturing
Transportation, Communications, Electric, Gas and Sanitary Services	TPU
Wholesale Trade	Wholesale Trade
Retail Trade	Retail Trade
Finance, Insurance and Real Estate	FIRE
Services	Services
Public Administration	Public Administration

Appendix V

Inflation Adjustment Factors Based on Consumer Product Index-Medical Care

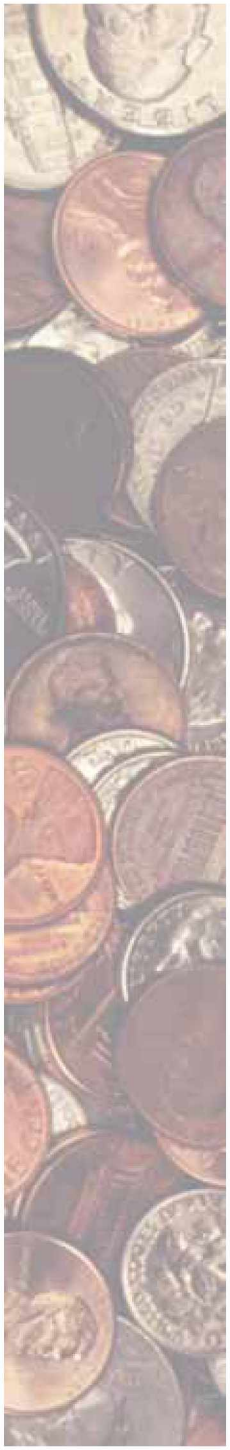
Year of Death	Index	Dollar Year											
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
1992	190.1	1.0000	0.9439	0.9009	0.8621	0.8330	0.8103	0.7852	0.7586	0.7289	0.6968	0.6656	0.6399
1993	201.4	1.0594	1.0000	0.9545	0.9134	0.8826	0.8585	0.8319	0.8037	0.7722	0.7383	0.7052	0.6779
1994	211.0	1.1099	1.0477	1.0000	0.9569	0.9246	0.8994	0.8715	0.8420	0.8090	0.7735	0.7388	0.7102
1995	220.5	1.1599	1.0948	1.0450	1.0000	0.9663	0.9399	0.9108	0.8799	0.8455	0.8083	0.7721	0.7422
1996	228.2	1.2004	1.1331	1.0815	1.0349	1.0000	0.9727	0.9426	0.9106	0.8750	0.8365	0.7990	0.7681
1997	234.6	1.2341	1.1648	1.1118	1.0639	1.0280	1.0000	0.9690	0.9362	0.8995	0.8600	0.8214	0.7896
1998	242.1	1.2735	1.2021	1.1474	1.0980	1.0609	1.0320	1.0000	0.9661	0.9283	0.8875	0.8477	0.8149
1999	250.6	1.3183	1.2443	1.1877	1.1365	1.0982	1.0682	1.0351	1.0000	0.9609	0.9186	0.8775	0.8435
2000	260.8	1.3719	1.2949	1.2360	1.1828	1.1429	1.1117	1.0772	1.0407	1.0000	0.9560	0.9132	0.8778
2001	272.8	1.4350	1.3545	1.2929	1.2372	1.1954	1.1628	1.1268	1.0886	1.0460	1.0000	0.9552	0.9182
2002	285.6	1.5024	1.4181	1.3536	1.2952	1.2515	1.2174	1.1797	1.1397	1.0951	1.0469	1.0000	0.9613
2003	297.1	1.5629	1.4752	1.4081	1.3474	1.3019	1.2664	1.2272	1.1856	1.1392	1.0891	1.0403	1.0000

Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index (Medical Care Major Group)

Appendix VI

Probability of Surviving an Additional Year by Age, Race, and Sex

Age	White		Black		Other	
	Male	Female	Male	Female	Male	Female
16 to 17	0.99898	0.99960	0.99827	0.99955	0.99847	0.99957
17 to 18	0.99882	0.99955	0.99795	0.99949	0.99820	0.99951
18 to 19	0.99873	0.99953	0.99769	0.99942	0.99799	0.99945
19 to 20	0.99868	0.99952	0.99748	0.99936	0.99783	0.99941
20 to 21	0.99864	0.99951	0.99726	0.99928	0.99766	0.99935
21 to 22	0.99859	0.99950	0.99702	0.99920	0.99748	0.99930
22 to 23	0.99855	0.99949	0.99683	0.99912	0.99733	0.99924
23 to 24	0.99852	0.99949	0.99670	0.99904	0.99724	0.99918
24 to 25	0.99850	0.99949	0.99662	0.99897	0.99717	0.99912
25 to 26	0.99849	0.99949	0.99656	0.99890	0.99713	0.99906
26 to 27	0.99847	0.99949	0.99649	0.99882	0.99708	0.99900
27 to 28	0.99844	0.99947	0.99637	0.99873	0.99699	0.99893
28 to 29	0.99838	0.99945	0.99618	0.99862	0.99685	0.99884
29 to 30	0.99831	0.99942	0.99593	0.99849	0.99667	0.99874
30 to 31	0.99823	0.99938	0.99567	0.99835	0.99649	0.99863
31 to 32	0.99815	0.99934	0.99542	0.99822	0.99631	0.99853
32 to 33	0.99807	0.99930	0.99515	0.99809	0.99611	0.99843
33 to 34	0.99799	0.99926	0.99487	0.99797	0.99589	0.99833
34 to 35	0.99790	0.99922	0.99456	0.99784	0.99565	0.99822
35 to 36	0.99781	0.99918	0.99423	0.99771	0.99538	0.99811
36 to 37	0.99770	0.99912	0.99388	0.99757	0.99511	0.99800
37 to 38	0.99760	0.99906	0.99355	0.99741	0.99484	0.99787
38 to 39	0.99750	0.99898	0.99325	0.99725	0.99462	0.99774
39 to 40	0.99740	0.99889	0.99298	0.99707	0.99442	0.99761
40 to 41	0.99729	0.99879	0.99270	0.99687	0.99421	0.99746
41 to 42	0.99717	0.99869	0.99238	0.99665	0.99397	0.99729
42 to 43	0.99702	0.99857	0.99201	0.99641	0.99369	0.99711
43 to 44	0.99683	0.99843	0.99159	0.99616	0.99335	0.99690



Age	White		Black		Other	
	Male	Female	Male	Female	Male	Female
44 to 45	0.99659	0.99827	0.99110	0.99589	0.99295	0.99665
45 to 46	0.99630	0.99807	0.99054	0.99558	0.99248	0.99637
46 to 47	0.99596	0.99785	0.98990	0.99522	0.99195	0.99604
47 to 48	0.99559	0.99760	0.98919	0.99481	0.99136	0.99567
48 to 49	0.99521	0.99735	0.98845	0.99436	0.99074	0.99527
49 to 50	0.99482	0.99709	0.98768	0.99388	0.99009	0.99485
50 to 51	0.99436	0.99679	0.98686	0.99336	0.98939	0.99439
51 to 52	0.99380	0.99644	0.98596	0.99279	0.98862	0.99388
52 to 53	0.99317	0.99606	0.98496	0.99219	0.98775	0.99335
53 to 54	0.99247	0.99566	0.98381	0.99157	0.98674	0.99279
54 to 55	0.99169	0.99524	0.98252	0.99090	0.98559	0.99219
55 to 56	0.99087	0.99479	0.98115	0.99021	0.98434	0.99157
56 to 57	0.98996	0.99429	0.97971	0.98946	0.98302	0.99090
57 to 58	0.98891	0.99372	0.97819	0.98858	0.98162	0.99013
58 to 59	0.98769	0.99307	0.97660	0.98753	0.98016	0.98923
59 to 60	0.98634	0.99236	0.97494	0.98637	0.97866	0.98824
60 to 61	0.98497	0.99163	0.97328	0.98518	0.97716	0.98722
61 to 62	0.98359	0.99088	0.97158	0.98398	0.97560	0.98619
62 to 63	0.98212	0.99007	0.96967	0.98273	0.97387	0.98509
63 to 64	0.98053	0.98919	0.96750	0.98141	0.97191	0.98390
64 to 65	0.97882	0.98823	0.96511	0.98003	0.96975	0.98260
65 to 66	0.97703	0.98722	0.96261	0.97858	0.96750	0.98123
66 to 67	0.97517	0.98617	0.96011	0.97709	0.96525	0.97982
67 to 68	0.97311	0.98500	0.95756	0.97558	0.96294	0.97838
68 to 69	0.97074	0.98366	0.95489	0.97399	0.96050	0.97688
69 to 70	0.96800	0.98209	0.95199	0.97226	0.95782	0.97527
70 to 71	0.96491	0.98031	0.94869	0.97035	0.95476	0.97350
71 to 72	0.96152	0.97832	0.94500	0.96823	0.95133	0.97149
72 to 73	0.95785	0.97614	0.94115	0.96589	0.94770	0.96925

Age	White		Black		Other	
	Male	Female	Male	Female	Male	Female
73 to 74	0.95402	0.97382	0.93745	0.96344	0.94414	0.96685
74 to 75	0.95007	0.97140	0.93401	0.96096	0.94079	0.96436
75 to 76	0.94586	0.96889	0.93069	0.95848	0.93749	0.96183
76 to 77	0.94125	0.96613	0.92715	0.95588	0.93397	0.95918
77 to 78	0.93628	0.96293	0.92325	0.95295	0.93012	0.95623
78 to 79	0.93080	0.95910	0.91855	0.94939	0.92556	0.95274
79 to 80	0.92467	0.95458	0.91287	0.94508	0.92011	0.94854
80 to 81	0.91754	0.94947	0.90597	0.93992	0.91356	0.94353
81 to 82	0.90951	0.94394	0.89831	0.93419	0.90630	0.93791
82 to 83	0.90109	0.93785	0.89063	0.92821	0.89894	0.93197
83 to 84	0.89285	0.93122	0.88422	0.92256	0.89251	0.92630
84 to 85	0.88481	0.92393	0.87938	0.91736	0.88727	0.92104
85 to 86	0.87564	0.91555	0.87485	0.91203	0.88173	0.91548
86 to 87	0.86478	0.90598	0.86914	0.90572	0.87493	0.90895
87 to 88	0.85305	0.89569	0.86204	0.89871	0.86682	0.90169
88 to 89	0.84073	0.88488	0.85264	0.89067	0.85667	0.89333
89 to 90	0.82781	0.87327	0.84088	0.88140	0.84440	0.88367
90 to 91	0.81383	0.85985	0.82715	0.87058	0.83023	0.87248
91 to 92	0.79841	0.84464	0.81249	0.85862	0.81498	0.86021
92 to 93	0.78227	0.82899	0.79838	0.84682	0.80001	0.84804
93 to 94	0.76624	0.81374	0.78776	0.83667	0.78802	0.83732
94 to 95	0.75107	0.79852	0.78085	0.82768	0.77939	0.82755
95 to 96	0.73671	0.78263	0.77341	0.81756	0.77097	0.81662
96 to 97	0.72086	0.76566	0.76208	0.80444	0.75952	0.80318
97 to 98	0.70601	0.74909	0.75018	0.79054	0.74750	0.78911
98 to 99	0.69131	0.73285	0.73769	0.77586	0.73487	0.77443
99 to 100	0.67587	0.71682	0.72458	0.76242	0.72162	0.76089

Source: National Center for Health Statistics: Vital Statistics of the United States, Vol 1 No 1, U.S. Decennial Life Tables

Appendix VII

Adjustment to Earnings by Age and Sex of Decedent at Time of Death

	Male										
Age	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
16	0.37937	0.37419	0.37997	0.38663	0.37914	0.38314	0.38417	0.39645	0.40537	0.42773	0.42373
17	0.41416	0.40886	0.41332	0.41966	0.41213	0.41642	0.41785	0.43060	0.43898	0.46162	0.45852
18	0.44895	0.44354	0.44668	0.45270	0.44513	0.44971	0.45154	0.46475	0.47258	0.49552	0.49330
19	0.48373	0.47821	0.48003	0.48573	0.47813	0.48300	0.48522	0.49890	0.50618	0.52942	0.52809
20	0.51852	0.51289	0.51339	0.51877	0.51113	0.51629	0.51891	0.53305	0.53978	0.56332	0.56287
21	0.55331	0.56490	0.54674	0.55181	0.54413	0.54957	0.55259	0.56720	0.57338	0.59722	0.59766
22	0.58810	0.59958	0.58010	0.58484	0.57712	0.58286	0.58628	0.60135	0.60699	0.63112	0.63245
23	0.62288	0.63425	0.61345	0.61788	0.61012	0.61615	0.61996	0.63550	0.64059	0.66501	0.66723
24	0.65767	0.66893	0.64680	0.65091	0.64312	0.64943	0.65365	0.66965	0.67419	0.69891	0.70202
25	0.69246	0.70361	0.68016	0.68395	0.67612	0.68272	0.68733	0.70381	0.70779	0.73281	0.73681
26	0.72725	0.73828	0.71351	0.71699	0.70912	0.71601	0.72102	0.73796	0.74140	0.76671	0.77159
27	0.76203	0.77296	0.74687	0.75002	0.74212	0.74930	0.75470	0.77211	0.77500	0.80061	0.80638
28	0.79682	0.80763	0.78022	0.78306	0.77511	0.78258	0.78839	0.80626	0.80860	0.83451	0.84117
29	0.83161	0.84231	0.81358	0.81609	0.80811	0.81587	0.82207	0.84041	0.84220	0.86840	0.87595
30	0.86640	0.87698	0.84693	0.84913	0.84111	0.84916	0.85576	0.87456	0.87580	0.90230	0.91074
31	0.89451	0.88799	0.87605	0.87748	0.86904	0.87723	0.88327	0.90129	0.90208	0.92917	0.93790
32	0.91595	0.91001	0.90093	0.90116	0.89190	0.90010	0.90460	0.92061	0.92103	0.94900	0.95744
33	0.93738	0.93202	0.92581	0.92483	0.91475	0.92296	0.92593	0.93993	0.93997	0.96884	0.97698
34	0.95882	0.95404	0.95069	0.94850	0.93761	0.94582	0.94727	0.95924	0.95892	0.98868	0.99652
35	0.98026	0.97606	0.97557	0.97218	0.96047	0.96869	0.96860	0.97856	0.97787	1.00851	1.01606
36	1.00169	0.99807	1.00045	0.99585	0.98333	0.99155	0.98993	0.99788	0.99682	1.02835	1.03560
37	1.02313	1.02009	1.02533	1.01952	1.00619	1.01442	1.01127	1.01719	1.01576	1.04818	1.05514
38	1.04457	1.04211	1.05021	1.04319	1.02905	1.03728	1.03260	1.03651	1.03471	1.06802	1.07468
39	1.06600	1.06412	1.07509	1.06687	1.05190	1.06014	1.05394	1.05582	1.05366	1.08785	1.09422
40	1.08744	1.08614	1.09997	1.09054	1.07476	1.08301	1.07527	1.07514	1.07261	1.10769	1.11376
41	1.10305	1.10247	1.11728	1.10776	1.09186	1.09965	1.09035	1.08951	1.08549	1.12086	1.12716
42	1.11282	1.11311	1.12702	1.11854	1.10321	1.11007	1.09917	1.09894	1.09230	1.12738	1.13441

Age	Male										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
43	1.12260	1.12375	1.13675	1.12932	1.11455	1.12050	1.10799	1.10836	1.09910	1.13389	1.14166
44	1.13238	1.13439	1.14649	1.14009	1.12589	1.13092	1.11681	1.11779	1.10591	1.14040	1.14892
45	1.14216	1.14503	1.15622	1.15087	1.13723	1.14134	1.12564	1.12722	1.11272	1.14692	1.15617
46	1.15194	1.15567	1.16596	1.16165	1.14858	1.15177	1.13446	1.13664	1.11953	1.15343	1.16342
47	1.16171	1.16632	1.17570	1.17242	1.15992	1.16219	1.14328	1.14607	1.12634	1.15994	1.17068
48	1.17149	1.17696	1.18543	1.18320	1.17126	1.17261	1.15210	1.15550	1.13315	1.16646	1.17793
49	1.18127	1.18760	1.19517	1.19398	1.18261	1.18304	1.16093	1.16492	1.13996	1.17297	1.18518
50	1.19105	1.19824	1.20490	1.20475	1.19395	1.19346	1.16975	1.17435	1.14677	1.17948	1.19244
51	1.19049	1.19714	1.20364	1.20466	1.19490	1.19497	1.17151	1.17613	1.14729	1.18030	1.19540
52	1.17958	1.18430	1.19138	1.19371	1.18544	1.18758	1.16622	1.17025	1.14151	1.17541	1.19406
53	1.16867	1.17145	1.17912	1.18276	1.17599	1.18018	1.16093	1.16438	1.13574	1.17053	1.19273
54	1.15777	1.15861	1.16686	1.17180	1.16654	1.17278	1.15563	1.15851	1.12997	1.16564	1.19140
55	1.14686	1.14577	1.15460	1.16085	1.15709	1.16538	1.15034	1.15264	1.12420	1.16076	1.19007
56	1.13595	1.13292	1.14234	1.14990	1.14763	1.15799	1.14505	1.14676	1.11842	1.15587	1.18874
57	1.12505	1.12008	1.13008	1.13895	1.13818	1.15059	1.13975	1.14089	1.11265	1.15099	1.18740
58	1.11414	1.10724	1.11782	1.12799	1.12873	1.14319	1.13446	1.13502	1.10688	1.14610	1.18607
59	1.10323	1.09440	1.10556	1.11704	1.11927	1.13580	1.12917	1.12915	1.10110	1.14122	1.18474
60	1.09233	1.08155	1.09330	1.10609	1.10982	1.12840	1.12387	1.12328	1.09533	1.13633	1.18341
61	1.07211	1.06293	1.07257	1.08453	1.09083	1.10646	1.10382	1.10064	1.07757	1.11776	1.16675
62	1.04259	1.03853	1.04336	1.05238	1.06230	1.06998	1.06901	1.06123	1.04781	1.08549	1.13478
63	1.01307	1.01413	1.01415	1.02023	1.03377	1.03350	1.03421	1.02183	1.01806	1.05322	1.10281
64	0.98355	0.98973	0.98495	0.98808	1.00524	0.99702	0.99940	0.98242	0.98831	1.02095	1.07083
65	0.95402	0.96532	0.95574	0.95592	0.97671	0.96053	0.96459	0.94302	0.95855	0.98868	1.03886
66	0.92450	0.94092	0.92653	0.92377	0.94818	0.92405	0.92978	0.90361	0.92880	0.95641	1.00688
67	0.89498	0.91652	0.89732	0.89162	0.91965	0.88757	0.89498	0.86421	0.89905	0.92414	0.97491
68	0.86546	0.89212	0.86812	0.85946	0.89112	0.85109	0.86017	0.82480	0.86929	0.89187	0.94294
69	0.83593	0.86772	0.83891	0.82731	0.86259	0.81461	0.82536	0.78540	0.83954	0.85960	0.91096
70	0.80641	0.84332	0.80970	0.79516	0.83406	0.77813	0.79055	0.74599	0.80978	0.82733	0.87899

Age	Female										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
16	0.55865	0.54594	0.53428	0.50955	0.53100	0.52912	0.51322	0.53731	0.54763	0.56352	0.58300
17	0.58882	0.57634	0.56574	0.54320	0.56191	0.56000	0.54453	0.56768	0.57781	0.59549	0.61598
18	0.61899	0.60674	0.59720	0.57685	0.59282	0.59089	0.57584	0.59806	0.60798	0.62747	0.64895
19	0.64915	0.63714	0.62866	0.61050	0.62372	0.62178	0.60715	0.62843	0.63816	0.65944	0.68192
20	0.67932	0.66754	0.66011	0.64415	0.65463	0.65267	0.63846	0.65880	0.66833	0.69141	0.71489
21	0.70949	0.69794	0.69157	0.67780	0.68554	0.68356	0.66978	0.68917	0.69851	0.72339	0.74786
22	0.73966	0.72834	0.72303	0.71145	0.71645	0.71445	0.70109	0.71954	0.72868	0.75536	0.78084
23	0.76983	0.75874	0.75449	0.74510	0.74736	0.74534	0.73240	0.74991	0.75885	0.78733	0.81381
24	0.80000	0.78914	0.78594	0.77875	0.77827	0.77623	0.76371	0.78028	0.78903	0.81930	0.84678
25	0.83017	0.81954	0.81740	0.81240	0.80918	0.80712	0.79502	0.81065	0.81920	0.85128	0.87975
26	0.86034	0.84993	0.84886	0.84605	0.84009	0.83800	0.82634	0.84102	0.84938	0.88325	0.91272
27	0.89051	0.88033	0.88031	0.87970	0.87100	0.86889	0.85765	0.87139	0.87955	0.91522	0.94570
28	0.92068	0.91073	0.91177	0.91335	0.90191	0.89978	0.88896	0.90176	0.90973	0.94719	0.97867
29	0.95085	0.94113	0.94323	0.94700	0.93281	0.93067	0.92027	0.93213	0.93990	0.97917	1.01164
30	0.98101	0.97153	0.97469	0.98065	0.96372	0.96156	0.95158	0.96250	0.97008	1.01114	1.04461
31	1.00078	0.99184	0.99656	1.00204	0.98484	0.98330	0.97228	0.98112	0.98786	1.03022	1.06529
32	1.01014	1.00206	1.00885	1.01118	0.99617	0.99588	0.98236	0.98799	0.99326	1.03642	1.07369
33	1.01951	1.01227	1.02114	1.02031	1.00749	1.00847	0.99244	0.99485	0.99865	1.04261	1.08208
34	1.02887	1.02249	1.03342	1.02944	1.01882	1.02105	1.00252	1.00172	1.00405	1.04881	1.09047
35	1.03823	1.03270	1.04571	1.03858	1.03014	1.03363	1.01260	1.00858	1.00944	1.05500	1.09887
36	1.04759	1.04292	1.05800	1.04771	1.04147	1.04622	1.02268	1.01545	1.01484	1.06120	1.10726
37	1.05696	1.05314	1.07029	1.05684	1.05279	1.05880	1.03276	1.02231	1.02023	1.06739	1.11565
38	1.06632	1.06335	1.08258	1.06598	1.06412	1.07139	1.04284	1.02917	1.02563	1.07359	1.12404
39	1.07568	1.07357	1.09486	1.07511	1.07544	1.08397	1.05292	1.03604	1.03102	1.07978	1.13244
40	1.08505	1.08378	1.10715	1.08424	1.08677	1.09656	1.06300	1.04290	1.03642	1.08598	1.14083
41	1.08947	1.08939	1.11293	1.09013	1.09456	1.10434	1.06997	1.04956	1.04361	1.09337	1.14802
42	1.08895	1.09039	1.11219	1.09278	1.09880	1.10731	1.07383	1.05601	1.05261	1.10196	1.15402

	Female										
Age	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
43	1.08843	1.09138	1.11145	1.09542	1.10305	1.11028	1.07769	1.06246	1.06160	1.11056	1.16001
44	1.08791	1.09238	1.11072	1.09807	1.10730	1.11326	1.08155	1.06891	1.07059	1.11915	1.16601
45	1.08739	1.09338	1.10998	1.10071	1.11154	1.11623	1.08541	1.07535	1.07958	1.12774	1.17200
46	1.08687	1.09437	1.10924	1.10335	1.11579	1.11921	1.08927	1.08180	1.08857	1.13633	1.17800
47	1.08635	1.09537	1.10850	1.10600	1.12004	1.12218	1.09313	1.08825	1.09757	1.14493	1.18399
48	1.08583	1.09637	1.10777	1.10864	1.12428	1.12516	1.09699	1.09470	1.10656	1.15352	1.18999
49	1.08531	1.09736	1.10703	1.11128	1.12853	1.12813	1.10085	1.10115	1.11555	1.16211	1.19598
50	1.08479	1.09836	1.10629	1.11393	1.13278	1.13111	1.10471	1.10760	1.12454	1.17070	1.20198
51	1.07919	1.09325	1.09953	1.10792	1.12771	1.12550	1.10235	1.10645	1.12305	1.17011	1.20208
52	1.06853	1.08204	1.08675	1.09326	1.11331	1.11131	1.09378	1.09772	1.11106	1.16031	1.19628
53	1.05787	1.07083	1.07397	1.07860	1.09892	1.09713	1.08520	1.08898	1.09907	1.15052	1.19049
54	1.04720	1.05962	1.06119	1.06393	1.08453	1.08294	1.07662	1.08024	1.08708	1.14073	1.18469
55	1.03654	1.04840	1.04841	1.04927	1.07014	1.06876	1.06804	1.07151	1.07509	1.13094	1.17890
56	1.02588	1.03719	1.03564	1.03461	1.05574	1.05457	1.05946	1.06277	1.06310	1.12115	1.17310
57	1.01521	1.02598	1.02286	1.01995	1.04135	1.04038	1.05088	1.05403	1.05111	1.11136	1.16731
58	1.00455	1.01476	1.01008	1.00529	1.02696	1.02620	1.04230	1.04530	1.03912	1.10156	1.16151
59	0.99389	1.00355	0.99730	0.99063	1.01256	1.01201	1.03372	1.03656	1.02713	1.09177	1.15572
60	0.98322	0.99234	0.98452	0.97596	0.99817	0.99783	1.02515	1.02782	1.01514	1.08198	1.14992
61	0.97165	0.97913	0.97051	0.96262	0.98083	0.98101	1.00735	1.01076	0.99645	1.06040	1.13244
62	0.95917	0.96393	0.95527	0.95061	0.96054	0.96156	0.98032	0.98539	0.97107	1.02703	1.10326
63	0.94668	0.94873	0.94003	0.93859	0.94025	0.94211	0.95330	0.96001	0.94570	0.99366	1.07409
64	0.93420	0.93353	0.92480	0.92657	0.91996	0.92266	0.92628	0.93463	0.92032	0.96028	1.04491
65	0.92172	0.91833	0.90956	0.91455	0.89966	0.90321	0.89925	0.90925	0.89494	0.92691	1.01574
66	0.90923	0.90313	0.89432	0.90254	0.87937	0.88377	0.87223	0.88387	0.86956	0.89354	0.98656
67	0.89675	0.88793	0.87909	0.89052	0.85908	0.86432	0.84521	0.85849	0.84418	0.86017	0.95739
68	0.88427	0.87273	0.86385	0.87850	0.83879	0.84487	0.81819	0.83312	0.81880	0.82680	0.92821
69	0.87178	0.85753	0.84861	0.86648	0.81850	0.82542	0.79116	0.80774	0.79343	0.79343	0.89904
70	0.85930	0.84233	0.83337	0.85446	0.79821	0.80597	0.76414	0.78236	0.76805	0.76005	0.86986

Appendix VIII

Employee Benefits as a Percent of Payroll by 1987 Standard Industrial Classification System (SIC) Industry Group

Industry Title	SIC	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total industry	9900 - 9999	27.2	28.6	28.8	29.6	27.4	28.6	26.6	27.7	28.1	27.9	30.7
Food, beverages, tobacco	2000 - 2141	22.3	24.0	21.1	20.7	19.7	20.6	20.5	23.1	25.1	24.1	27.6
Textile and wearing apparel	2200 - 2399	25.2	25.2	25.0	25.1	23.9	25.9	26.2	32.8	25.1	29.0	25.2
Pulp, paper, lumber &furniture	2400 - 2679	26.7	24.7	25.6	24.5	27.8	24.8	28.2	24.9	24.7	24.8	28.6
Printing and publishing	2700- 2796	28.1	31.7	29.0	26.0	26.8	27.4	28.0				
	2752 - 2796								20.8	25.2	23.0	25.2
Chemicals and allied products	2800 - 2899	25.0	29.7	29.1	25.4	24.4	25.4	17.1	27.9	28.7	28.3	25.2
Petroleum	2900 - 2999	37.2	28.0	27.3	23.9	25.2	29.2	29.0				
Rubber, leather, and plastic	3000 - 3199	26.8	26.1	30.2	23.8	23.5	26.1	25.9	21.8	24.8	23.3	25.4
Stone, clay, and glass	3200 - 3299	32.0	28.4	24.0	25.5	28.6	29.5	25.1				
Primary metals	3300 - 3399	29.9	28.3	28.3	25.3	24.9	27.1	27.0				
Fabricated metals	3400 - 3499	26.2	27.6	33.3	32.7	30.4	29.7	22.7	24.0	22.3	23.2	27.8
Machinery, except electric equip.	3500 - 3599	30.1	28.2	31.1	35.3	21.9	28.2	30.4				
	3500 - 3569								36.7	24.5	30.6	29.7
Other machinery	3580 - 3599								36.7	24.5	30.6	29.7
Computer, electronic,etc	3570 - 3579								23.8	20.9	22.4	30.4
Electric machinery	3600 - 3699	29.4	29.5	40.3	36.1	33.2	34.8	21.1	23.8	20.9	22.4	30.4
Transportation equipment	3700 - 3799	21.3	24.1	24.4	27.6	27.2	24.3	24.3				
	3700 - 3728 3732 - 3799								23.1	30.6	26.9	25.2
Other manufacturing	3800 - 3999 8072; 2900-2999; 3210- 3399								23.1	25.1	24.1	25.2
Instruments and misc. mfg.	3800 - 3999	26.9	28.9	28.6	29.4	27.0	28.8	21.1				
Public utilities	4900 - 4971	29.0	32.6	33.6	35.1	32.9	33.7	28.8				
	4900 - 4911; 4924 4952; 4961- 4971								36.3	32.1	34.2	42.6
Department stores	5310 - 5311	24.5	23.3	27.4	24.9	24.7	24.8	35.6				
Trade (wholesale)	5000 - 5271	26.2	27.9	25.2	24.1	22.3	26.5	21.0				
	5000 - 5199								26.0	27.9	27.0	26.0
Trade (retail)	5300 - 5999	26.2	27.9	25.2	24.1	22.3	26.5	35.6				
	5200 - 5271; 5310-5736; 5910- 5999								16.2	28.1	22.2	19.3
Eating & Drinking & Hotels, etc.	5800 - 5813; 7010- 7041								18.9	16.3	17.6	36.7
Banks, finance	6000 - 6289	20.5	22.1	22.0	23.4	22.4	20.2	24.1				
	6000 - 6289; 6722-6726								23.9	25.3	24.6	24.5
Insurance	6300 - 6399	26.1	28.0	26.7	27.9	25.5	26.5	26.5				
	6300 - 6411								23.9	25.3	24.6	24.5
Health Care	8011 - 8059; 8060- 8069, 8071; 8080 -8099; 8361								21.0	25.1	23.1	22.0
Hospitals	8060 - 8069	20.2	23.1	22.3	20.9	22.3	22.8	22.9				

Industry Title	SIC	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Information Services	2710 -2741; 4810- 4899; 7373- 7379; 7383; 7810 -7833; 8231								22.5	26.2	24.4	36.7
Professional Services	0741 -0742; 8111; 7311 -7338; 7371; 7384; 7389; 6541; 8711- 8748								21.8			
Professional Services	0741- 0742; 8111;7311 7338; 7371; 7384; 7389; 6541; 8711 - 8734									21.7	21.7	28.0
Mgmt Services	8740 - 8748									18.9	18.9	36.7
Transportation dist/warehouse	3731; 4010 4492; 4499 4619; 4729- 4789; 4922 - 4923								38.3	37.3	37.8	28.2
Social Assistance	8320 -8351								21.7	26.2	24.0	22.0
Educational Services	8210 -8222; 8243- 8299								23.7	24.2	24.0	36.7
Arts, Entertainment, Rec	7900 -7999; 8410- 8422									18.6	36.8	36.7
Misc. non manufacturing	0100 -1499; 4000- 4789- 6400 8059; 8070 - 9721	27.6	28.3	28.0	29.5	28.5	29.2	32.8				
Misc. non manufacturing	010 - 0724; 0751 -0499; 4493; 4724-4725; 4953-4959; 6510- 6553; 6710 -6719; 6732-6799; 7210- 7299; 7342-7363; 7372; 7381 -7382; 7500 -7699; 7840- 7999; 8399 -8699; 8810- 9721								20.9			
Misc. non manufacturing	0100 -0724; 0751- 1499; 4493; 4724- 4725; 4953-4959; 6710- 6719; 6732-6799; 7210 -7299; 7342-7363; 7372; 7381- 7382; 7500 -7699; 7840 -7841; 8399; 8610- 8699; 8810- 9721									36.8	36.8	36.7
Real Estate	6510 - 6531									23.5	23.5	18.4
Construction	1500 - 1799	27.6	28.3	28.0	29.5	28.5	29.2	17.9	22.4	22.3	22.4	22.1
Communications	4800 - 4899	27.6	28.3	28.0	29.5	28.5	29.2	12.6				

Appendix IX

Inflation Adjustment Factors Based on Gross Domestic Product Deflator

Year of Death	Original GDP	Dollar Year											
		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
1992	86.4	1.0000	0.9774	0.9571	0.9379	0.9204	0.9054	0.8954	0.8827	0.8639	0.8436	0.8299	0.8150
1993	88.4	1.0231	1.0000	0.9792	0.9596	0.9417	0.9263	0.9161	0.9031	0.8838	0.8631	0.8491	0.8338
1994	90.3	1.0448	1.0212	1.0000	0.9799	0.9617	0.9460	0.9356	0.9223	0.9026	0.8814	0.8671	0.8515
1995	92.1	1.0662	1.0421	1.0205	1.0000	0.9814	0.9653	0.9547	0.9411	0.9211	0.8995	0.8849	0.8689
1996	93.9	1.0864	1.0619	1.0398	1.0190	1.0000	0.9836	0.9728	0.9590	0.9385	0.9165	0.9016	0.8854
1997	95.4	1.1045	1.0796	1.0571	1.0359	1.0166	1.0000	0.9890	0.9749	0.9541	0.9318	0.9166	0.9001
1998	96.5	1.1168	1.0915	1.0688	1.0474	1.0279	1.0111	1.0000	0.9857	0.9647	0.9421	0.9268	0.9101
1999	97.9	1.1329	1.1073	1.0843	1.0626	1.0428	1.0257	1.0145	1.0000	0.9787	0.9558	0.9402	0.9233
2000	100.0	1.1576	1.1315	1.1079	1.0857	1.0655	1.0481	1.0366	1.0218	1.0000	0.9766	0.9607	0.9434
2001	102.4	1.1854	1.1586	1.1345	1.1118	1.0911	1.0732	1.0614	1.0463	1.0240	1.0000	0.9837	0.9660
2002	104.1	1.2050	1.1778	1.1533	1.1301	1.1091	1.0910	1.0790	1.0636	1.0409	1.0165	1.0000	0.9820
2003	106.0	1.2270	1.1993	1.1744	1.1508	1.1294	1.1109	1.0987	1.0831	1.0600	1.0351	1.0183	1.0000

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Implicit Price Deflators for Gross Domestic Product.

Appendix X

Adjustment Factors for Increases Associated with Career Growth by Age, Sex, and Race

	Male				Female			
Age	Other	White	Black	Hispanic	Other	White	Black	Hispanic
16	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
17	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
18	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
19	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
20	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
21	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
22	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
23	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
24	1.178421	1.180746	1.149965	1.106431	1.110945	1.110392	1.113542	1.079347
25	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
26	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
27	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
28	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
29	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
30	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
31	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
32	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
33	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
34	1.038625	1.039084	1.025737	1.023383	1.014546	1.013302	1.011039	1.012115
35	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
36	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
37	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
38	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
39	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
40	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
41	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
42	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432

	Male				Female			
Age	Other	White	Black	Hispanic	Other	White	Black	Hispanic
42	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
43	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
44	1.008849	1.008627	1.004751	1.005298	1.000431	1.000456	1.009062	0.994432
45	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
46	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
47	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
48	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
49	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
50	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
51	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
52	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
53	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
54	0.986407	0.986751	0.978142	0.986647	0.981522	0.982711	0.972257	0.978843
55	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
56	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
57	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
58	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
59	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
60	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
61	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
62	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
63	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
64	0.96781	0.967439	0.97349	0.963994	0.98476	0.985622	0.97273	0.979321
65	0.977462	0.977422	0.97361	0.977061	0.992866	0.993195	0.983066	0.983614
66	0.977462	0.977422	0.97361	0.977061	0.992866	0.993195	0.983066	0.983614
67	0.977462	0.977422	0.97361	0.977061	0.992866	0.993195	0.983066	0.983614

Appendix XI

Annual Household Production Values by Age and Sex

Age	Male	Female	Age	Male	Female
16	$5,299.80	$5,799.85	42	10,278.40	15,665.80
17	5,299.80	5,799.85	43	10,278.40	15,665.80
18	6,088.20	11,081.40	44	10,278.40	15,665.80
19	6,088.20	11,081.40	45	10,716.40	15,366.50
20	6,088.20	11,081.40	46	10,716.40	15,366.50
21	6,088.20	11,081.40	47	10,716.40	15,366.50
22	6,088.20	11,081.40	48	10,716.40	15,366.50
23	6,088.20	11,081.40	49	10,716.40	15,366.50
24	6,088.20	11,081.40	50	10,716.40	15,366.50
25	8,792.85	13,873.65	51	10,716.40	15,366.50
26	8,792.85	13,873.65	52	10,716.40	15,366.50
27	8,792.85	13,873.65	53	10,716.40	15,366.50
28	8,792.85	13,873.65	54	10,716.40	15,366.50
29	8,792.85	13,873.65	55	12,647.25	16,939.65
30	8,792.85	13,873.65	56	12,647.25	16,939.65
31	8,792.85	13,873.65	57	12,647.25	16,939.65
32	8,792.85	13,873.65	58	12,647.25	16,939.65
33	8,792.85	13,873.65	59	12,647.25	16,939.65
34	8,792.85	13,873.65	60	12,647.25	16,939.65
35	10,278.40	15,665.80	61	12,647.25	16,939.65
36	10,278.40	15,665.80	62	12,647.25	16,939.65
37	10,278.40	15,665.80	63	12,647.25	16,939.65
38	10,278.40	15,665.80	64	12,647.25	16,939.65
39	10,278.40	15,665.80	65	13,870.00	16,571.00
40	10,278.40	15,665.80	66	13,870.00	16,571.00
41	10,278.40	15,665.80	67	13,870.00	16,571.00

Appendix XII

Sensitivity of Total Lifetime Costs[1] Estimates to Selected Discount Rates

Year of Death	0% Discount Rate	3% Discount Rate	5% Discount Rate	10% Discount Rate
	Total Lifetime Costs			
1992	$7,134,504	$4,781,514	$3,861,864	$2,583,410
1993	7,294,755	4,905,306	3,968,213	2,661,127
1994	7,671,060	5,169,299	4,186,544	2,812,800
1995	7,237,527	4,890,677	3,966,307	2,670,796
1996	6,994,948	4,744,542	3,855,777	2,606,101
1997	7,186,829	4,866,664	3,952,886	2,670,511
1998	6,994,119	4,758,606	3,873,135	2,624,075
1999	6,923,516	4,709,188	3,832,775	2,596,737
2000	7,277,260	4,949,493	4,028,342	2,728,904
2001	7,331,709	4,988,878	4,060,729	2,750,814
2002	6,847,557	4,677,759	3,814,666	2,591,433
Total	78,893,783	53,441,927	43,401,239	29,296,707

[1]Costs are expressed in 2003 US dollars and presented in thousands.

Sensitivity of Mean and Median Costs[1] Estimates to Selected Discount Rates

Year of Death	0% Discount Rate		3% Discount Rate		5% Discount Rate		10% Discount Rate	
	Mean Costs	Median Costs	Mean Costs	Median Costs	Mean Costs	Median Costs	Mean Costs	Median Costs
1992	$1,223	$1,246	$820	$814	$662	$655	$443	$435
1993	1,219	1,265	819	828	663	663	445	438
1994	1,217	1,256	820	821	664	661	446	437
1995	1,215	1,259	821	827	666	664	448	441
1996	1,186	1,230	804	815	654	658	442	440
1997	1,195	1,245	809	827	657	664	444	442
1998	1,198	1,238	815	819	663	666	449	445
1999	1,188	1,241	808	832	658	673	446	453
2000	1,278	1,313	869	879	708	713	479	478
2001	1,294	1,330	881	876	717	721	486	489
2002	1,292	1,331	883	885	720	722	489	487
Total	1,227	1,267	831	838	675	677	456	452

[1]Costs are expressed in 2003 U.S. dollars and presented in thousands.

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